

Graduate Catalog

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2001-2002



# Towson University Graduate Catalog 2001-2002

## Accreditation

Towson University is accredited by the Middle States Association of Colleges and Schools. The university is a member of the Council of Graduate Schools in the United States and the Northeastern Association of Graduate Schools.

*Towson University is in compliance with federal and state laws and regulations that prohibit illegal discrimination. The university does not discriminate on the basis of sexual orientation.*

# Academic Calendar

## 2001-2002

(See appropriate semester course booklet for registration dates, times and information.)

### Fall Semester 2001

#### August

- 29 Classes begin.  
Change of schedule period begins.

#### September

- 3 Labor Day (no classes).
- 11 Change of schedule period ends. Last day to drop a course with no grade posted to academic record. Last day to add a course.
- 14 Last day to withdraw from first 7-week courses with a grade of W.
- 15 Deadline for submitting graduation application for January.

#### October

- 19 Mid-semester and end of first 7-week courses.
- 22 Second 7-week courses begin.

#### November

- 7 Last day to withdraw from full semester or second 7-week courses with a grade of W.  
Last day to change to or from Pass or Audit grading options.
- 21-23 Thanksgiving holiday—no classes.
- 26 Classes resume.

#### December

- 12 Last day of classes (last Saturday classes meet December 8).
- 13 Final examinations begin.
- 19 Last day of examinations and end of semester.

## 2 ACADEMIC CALENDAR

### Spring Semester 2002

#### January

- 2 Minimester begins.
- 2-3 Minimester change of schedule period.
- 6 Commencement.
- 21 Martin Luther King Jr. Day (no classes).
- 23 Minimester ends.
- 28 Spring classes begin. Change of schedule period begins.

#### February

- 1 Deadline for submitting graduation application for May.
- 4 Change of schedule period ends. Last day to drop a course with no grade posted to academic record. Last day to add a course.
- 12 Last day to withdraw from first 7-week courses with a grade of W.

#### March

- 15 Mid-semester and end of first 7-week courses.
- 18 Second 7-week courses begin.
- 24-31 Spring Break.

#### April

- 1 Classes resume.
- 5 Last day to withdraw from full semester or second 7-week courses with a grade of W. Last day to change to or from Pass or Audit grading options.

#### May

- 14 Last day of classes (last Saturday classes meet May 8).
- 15 Final examinations begin.
- 21 Final examinations end.
- 22 Commencement.
- 23 Commencement.

#### June

- 1 Deadline for submitting graduation application for September.

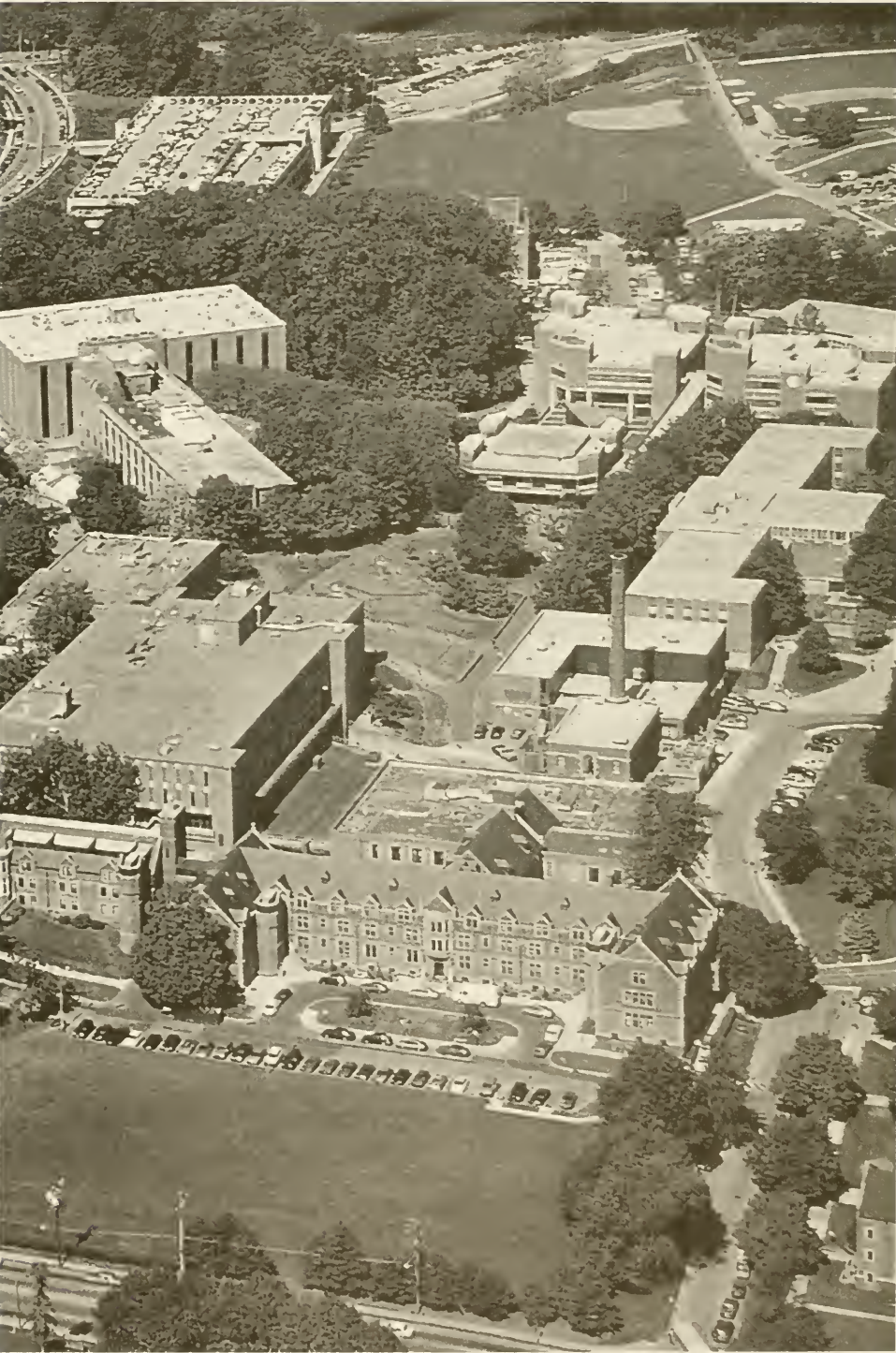


# Towson University

## GRADUATE CATALOG 2001-2002

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# Towson University

## History

The institution known today as Towson University opened its doors in 1866 in downtown Baltimore as the Maryland State Normal School—the only institution devoted exclusively to the preparation of teachers for the public schools of Maryland. The first class consisted of 11 students.

In 1915 the school moved to Towson. By 1935 it established the Bachelor of Science degree in education and changed its name to Maryland State Teachers College at Towson. In 1946 it introduced an arts and sciences program, and in 1963 the institution expanded its offerings in the arts and sciences and became Towson State College.

Towson was granted university status on July 1, 1976, in recognition of its development into a comprehensive university. In 1988 Towson State University joined the University System of Maryland. On July 1, 1997, Towson State University became Towson University, a change that reflects its evolution from a state-supported to a state-assisted institution. As of May 2000, the university has graduated 87,032 students. Since 1960, Towson University has awarded more than 9,000 advanced degrees.

Towson University enrolls and graduates more undergraduate students from the region than any other institution. Enrollment for the 2000 fall semester was 13,905 undergraduates and 2,824 graduate students.

## The Campus

The university is situated on a beautifully landscaped 328-acre campus in the suburban community of Towson, Md., just eight miles north of downtown Baltimore. Students have easy access to the many cultural advantages of the city of Baltimore — the Peabody Conservatory of Music and Library, the Enoch Pratt Free Library, the Walters Art Museum, the Baltimore Museum of Art, Meyerhoff Symphony Hall, the Lyric Theatre, Center Stage and many other cultural centers necessary for a well-rounded university experience.

Campus buildings and facilities give excellent support to the various university programs. The inside back cover of this catalog provides a pictorial guide of the campus, and Appendix A describes the campus facilities.



## THE COLLEGE OF GRADUATE EDUCATION AND RESEARCH

Since 1995, enrollment in the Graduate School has increased 51 percent, with the 2000 fall student headcount being the highest ever, at 2,824. A team of administrators and staff in the college are committed to providing students with quality educational programs at the post-baccalaureate level and the highest level of student support services.

Overall, the unique aspect of TU's graduate education is providing students with cutting-edge courses and programs of study to develop the specific skills and knowledge needed by career professionals. TU has accepted the challenge set out by the Maryland Higher Education Commission to provide innovative graduate courses and programs that respond to specific state, regional and national work force demands. Moreover, many enrolled graduate students are working full time, so graduate courses are offered at convenient times and at off-campus sites as well as at the main TU campus.

TU currently offers more than 40 graduate programs at the certificate, master's and doctoral levels. In addition, the College of Graduate Education and Research will develop more applied graduate programs as the needs of students, businesses and the community continue to grow. Faculty from across the university community and professors of practice work together in graduate education. Many of the faculty members are nationally prominent scholars who encourage graduate students to collaborate on faculty research projects and creative productions.

To provide the best possible education for its graduate students the College of Graduate Education and Research is guided by its vision and mission for graduate education.

### Vision Statement

As TU develops into "one of the nation's premier regional comprehensive universities," expanding the mission of graduate education will play an important role in achieving this goal. In particular, TU will broaden the scope of graduate programs; will provide opportunities for faculty members to utilize the full complement of their disciplinary, creative, and research knowledge; and will actively recruit outstanding students, as it provides high-quality graduate education for its residents within the mid-Atlantic region. TU's graduate education program will continue to be measured through an ongoing process of assessment and periodic evaluation.

TU will educate graduate students through the utilization of innovative technologies that promote learning through teaching and scholarship. Access to graduate programs will be available to all eligible students, will be offered at a variety of locations, and will be delivered through various platforms, including: online courses, distance education and learning cohorts.

Graduate education at TU will strive to balance theoretical knowledge with practical learning. This will be achieved by offering several applied doctoral degrees and a wide range of quality master's degrees and certificates in the liberal and fine arts, teacher education, allied health fields, natural sciences, social sciences, business and various professional disciplines. Students will be provided the opportunity to participate in professional internships, applied and pure research, and in supervised clinical experiences.

### Mission Statement

The mission of graduate education at TU is to provide programs of study that allow individuals to advance their knowledge, increase

their practical skills, and develop leadership abilities in a broad spectrum of professions; to enhance their disciplinary knowledge through the collaboration of faculty and students on research projects; to be actively engaged in the process of improving the quality of life for others and themselves; and to develop the desire in each individual to become a continuous, life-long learner. To achieve its mission, the Graduate School at TU has identified the following goals:

- To provide all students with high-quality graduate programs in traditional areas and applied or interdisciplinary fields.
- To provide a broad selection of academic programs that are current, continually updated and technologically based; to integrate and make available basic and applied research; to prepare students to achieve their professional and personal goals; and to meet the needs of the work force.
- To promote graduate education that is adult-student-centered and fosters diversity.
- To promote and acknowledge faculty and student scholarship.
- To review and periodically update policies and services for graduate education to facilitate the achievement of student and faculty goals.
- To develop processes for ongoing assessment and periodic evaluation of graduate programs.

Welcome to the Graduate School at Towson University and good luck with your program of study.

Jin Kang Gong, Ph.D.  
Dean, College of Graduate  
Education and Research

### **Graduate Studies Committee**

The Graduate Studies Committee, a committee of the University Senate, determines Graduate School policy and is responsible for graduate curriculum and standards.

The voting membership comprises six members of the faculty, two program directors and two graduate students. The dean of the College of Graduate Education and Research and the director of the library are ex officio members.

The Graduate Studies Committee also hears student appeals that are related to academic matters. The appeals process is described in Appendix F.

### **Administration**

The dean and staff of the College of Graduate Education and Research administer the Graduate School and implement the policies established by the Graduate Studies Committee. On all matters of curriculum and academic requirements for individual graduate programs, the faculty contacts are the program directors.

Individual career planning and assistance is available in the Graduate School office. The office is open Monday through Thursday, 8 a.m.-6 p.m. and Friday, 8 a.m.-5 p.m. (except for scheduled holidays). During registration, the office is open in the evening according to the registration schedule.

Students may arrange appointments with the Graduate School staff during working hours. Other hours are available by appointment only. The Graduate School telephone number is 410-704-2501.

### **Correspondence**

Correspondence concerning graduate study should be addressed to:

Coordinator, Graduate School Office  
Towson University  
8000 York Road  
Towson, MD 21252-0001  
410-704-2501  
[www.towson.edu/grad](http://www.towson.edu/grad)





# Procedures and Policies

## APPLICATION AND ADMISSION TO THE GRADUATE SCHOOL

The application process is administered through the Graduate School Office. To request a complete admissions package, contact the Graduate School Office, 410-704-2501, 1-888-4TOWSON or through the World Wide Web at [www.towson.edu/grad](http://www.towson.edu/grad).

The Graduate School at Towson University admits applicants whose academic and personal qualifications give promise of success in graduate study. The applicant must hold a baccalaureate degree from a regionally accredited college or university, or from a Maryland college or university that is approved by the Maryland Higher Education Commission.

### Full Admission

An applicant for admission to a degree program can meet admission requirements by holding (1) a master's degree or doctorate from a regionally accredited college or university, or (2) a bachelor's degree with a grade point average of 3.00 (on a 4-point scale) and all additional admission requirements of the specific graduate program. The grade point average will be calculated for the most recent 60 credits. Courses beyond the baccalaureate degree must be at least upper-division undergraduate work to be used in the GPA calculation.

### Conditional Admission

Under certain conditions, graduate programs may admit students who have lower than a 3.00 GPA. The minimum acceptable GPA, and other specific conditions such as prerequisite courses, are established by each program. Students admitted under the Conditional Admissions status are required to correct any deficiencies as determined by the graduate program director. The requirements

to continue in the program are listed on the admissions worksheet and sent to the graduate student from the graduate program director. Completion of the conditional stipulation removes this status from the student's record.

The minimum undergraduate grade point average for conditional admission may be waived for an applicant whose undergraduate degree was obtained at least 10 years earlier, and who can document a minimum of five years of successful working experience in a field relevant to the applicant's program. The candidate's application to the Graduate School must be supported in writing by the program director. Candidates must meet all other entrance requirements of the program.

### Provisional Admission

Several graduate programs grant provisional admission to students with a minimum GPA of 2.50. A student admitted provisionally is required to achieve a 3.50 GPA in the first 12 graduate credits taken at Towson University. The 12 credits can be included toward a Towson University graduate degree program, if approved by the graduate program director. Completion of the provisional requirement removes this status from the student's record.

### Non-Degree Enrollment

Students may elect to enroll for graduate courses as non-degree students. Students generally choose non-degree status when (1) their academic goal is not completion of a degree or certificate program; (2) they wish to begin course work prior to final evaluation of their credentials for admission to a program; or (3) they have been denied admission to a program but choose to take selected courses. Non-degree students may register for courses through the 600 level. Non-degree students who wish to take courses above the 600 level may do so

after a transcript evaluation. Requests for an evaluation should be directed to the associate dean. A limit of 12 credits, taken while a non-degree student, may be applied to a degree program with the approval of the program director.

### International Students

To ensure timely processing, the completed application for international students should be received no later than April 15 for fall, and October 15 for spring. (Applicants must also adhere to program-specific deadlines.) The Graduate School requires that applicants who have attended institutions outside of the United States have their academic records evaluated by a credential evaluation service. The assessment should include a course-by-course evaluation of the student's academic records, including the degree received and grade point average (GPA). The evaluation process takes a minimum of four weeks. Assessments should be sent directly to the Graduate School. Visit our Web site at [www.towson.edu/grad](http://www.towson.edu/grad) for a list of authorized credential evaluation service centers and other documentation that must be submitted by international students.

Among the authorized credential evaluation services are:

American Service Center for  
International Students and  
Scholars, Inc.

P.O. Box 250

Hunt Valley, MD 21030

410-785-3696

Fax: 410-785-6638

[www.asciss.org](http://www.asciss.org)

International Consultants of  
Delaware, Inc.

109 Barksdale Professional Center

Newark, DE 19711

302-737-8715

Fax: 302-737-8756

E-mail: [icd@icdel.com](mailto:icd@icdel.com)

Josef Silny & Associates, Inc.

International Education Consultants

P.O. Box 248233

Coral Gables, FL 33124

305-666-0233

The Knowledge Company

10301 Democracy Lane, Suite 403

Fairfax, VA 22030-2521

703-359-3520

[www.knowledgecompany.com](http://www.knowledgecompany.com)

World Education Services

P.O. Box 745

Old Chelsea Station

New York, NY 10113-0745

212-966-6311

1-800-WES-3985

[www.wes.org](http://www.wes.org)

International students must provide verification of their English competency by taking the Test of English as a Foreign Language (TOEFL). A minimum score of 550 on the TOEFL (213 on the computerized test) is required for admission. (A minimum score of 500—or 173 on the computerized test—is required for admission into Applied and Industrial Mathematics, Computer Science, Music Performance, and Studio Arts.) Information about the TOEFL administration dates and registration procedures may be obtained from TOEFL, Educational Testing Service, Princeton, NJ 08540, USA, or [www.toefl.org](http://www.toefl.org). Towson University is a test site for the TOEFL. Towson University administers an institutional TOEFL in the fall (December) and spring (May). Information can be obtained from TU's English Language Center, 410-704-2552.

### Admission Prior to Receiving Baccalaureate Degree

Admission to some programs may be granted to seniors in their final semester. Undergraduate work through the first semester of the senior year is evaluated; therefore transcripts submitted must include all grades through that semester. Admission standing is subject to cancellation or change if the admission credentials remain incomplete or do not meet the requirements for admission upon receipt of the final transcript.



## Graduate Work by Seniors at Towson University

Seniors at TU may register for a maximum of 6 credits of graduate study if they meet the following criteria: (1) the graduate courses must be in excess of the credits required for the bachelor's degree; (2) the student submits to the Graduate School Office, in advance of registration, a written request specifying the graduate courses requested; (3) the student maintains a 3.00 or higher cumulative average. Payment for the courses is separate from that of undergraduate courses taken in the same semester and is at the graduate tuition rate. The courses may be transferred later to the student's graduate record.

## Dual Career Program

Towson University offers the Dual Career Program for post-baccalaureate students who wish to pursue a second bachelor's degree or an undergraduate certificate in teaching or premedicine while enrolled in a master's degree program at TU. Students who are interested in taking graduate and undergraduate studies in different fields at the same time may contact the Office for Non-Traditional Undergraduate Programs, 410-704-2471, for further information.

## Validation of Undergraduate Degree

An applicant enrolled for courses is not allowed to register beyond the first semester if the transcript validating the baccalaureate degree is not received in the Graduate School Office by the required date; no refund is granted, and the student's application is removed from the graduate files. A new application and fee must be submitted if the student wishes to take courses for graduate credit at a later time.

## REGISTRATION AND FEES

### Registration

Information concerning registration, including semester course schedule booklets, may be obtained in the Graduate School Office. Only students admitted to a graduate program without conditions may register for 700- and

800-level courses except with special permission of the Graduate School.

## Deferred Registration after Admission

Students admitted to a degree program may defer registration for initial courses for up to one year, with the consent of the graduate program director. If enrollment in courses does not occur within one year, or the student does not inform the Graduate School Office of another starting date, the applicant's records will be removed from the files and the student must reapply for future enrollment.

## Continuous Enrollment

Students are expected to register for courses on a regular basis. Previous degree candidates who have missed one academic year must be reactivated for enrollment through the Graduate School Office. If two academic years for degree students or five academic years for non-degree students elapse during which a student does not enroll for courses for graduate credit, the student's records are removed from the Graduate School Office files. If the student desires to take graduate courses after this action, he or she must initiate the application process as a new applicant.

## Full-Time and Part-Time Status

A student who registers for 9 graduate credits in the fall or spring semester (6 during summer session) is considered a full-time student. One who takes fewer credits is designated a part-time student. The maximum load for full-time students is 12 credits (9 in summer).

## Auditing Courses

Students may audit courses that carry graduate credit with the written consent of the instructor. Any graduate student may audit a course through the 600 level. Courses at the 700 level may be audited only by students admitted to a degree program. Audited courses appear on the university record as AU and may not be used to repeat a course for which credit has already been earned. Audited courses may not count as part of the credit hour load or be applied toward the master's degree. The regular tuition rate applies to audited courses.

## Visiting Graduate Students

Students who are candidates for a graduate degree at another college or university may take graduate courses at Towson University. At registration the student must present a letter from the graduate dean of the home institution indicating that the student is in good standing and that credit earned at TU is acceptable toward his or her degree.

## Inter-Institutional Enrollment

Students admitted to graduate programs are eligible to take courses at other University System of Maryland schools. Credits earned at a host school will be placed on the student's Towson record with the grade earned. Tuition and fees for any such courses will be paid at Towson. Regulations governing this type of enrollment and the form for registration may be obtained in the Graduate School Office. The form must be signed by the associate dean after appropriate approval is obtained. Inter-institutional enrollment is not available for the summer session.

### Course Numbers

Each department has one or more three- or four-letter codes preceding the three-digit course classification number. The three-digit course number indicates the following level:

100-499	undergraduate courses
500-599	upper-division courses offered for graduate credit
600-699	graduate courses available to all post-baccalaureate students
700-799	graduate courses available only to fully admitted graduate students
800-899	graduate research and thesis courses

## Upper-Division Courses for Graduate Credit

A maximum of three courses at the 500-level may be included to meet the requirements for a graduate degree. A course taken for undergraduate credit may not be repeated at the 500 level for graduate credit.

## POLICIES ON ACADEMIC PROGRESS

### Grading System

A - 4 quality points

B - 3 quality points

C - 2 quality points

F - 0 quality points

FX — assigned when the student registers for a course but does not attend, or fails to withdraw officially from the course by the published last date to drop the course.

I (incomplete) — assigned at the end of the semester because of illness or other reasons beyond the control of the student. Unless the course is completed by the last day of the next regular semester, the grade becomes F. It is the responsibility of the student to make arrangements to complete course requirements for removal of the I.

IP (in progress) — assigned for the thesis continuum. When the thesis is completed, the IP grades are changed to S (satisfactory) or U (unsatisfactory).

W (withdrawn) — assigned when the student withdraws from the course according to policy.

### Academic Standing

Good academic standing in a degree program requires a minimum 3.00 grade point average for all courses taken for graduate credit whether or not they are required for the degree. Good academic standing is necessary to transfer course work, and to graduate.

Should the degree student's average fall below a 3.00, a letter of academic warning will be sent. The grade point average must be restored to 3.00 within three courses completed in a one-year period from the semester in which the GPA fell below 3.00. A student on academic probation who does not restore the GPA to 3.00 as required will be withdrawn from the degree program. The 3.00 average may be restored by repeating courses or by taking additional courses. If courses beyond those required in the degree are taken to raise the GPA, a maximum of two courses approved by the graduate program director is allowed. All requirements for the program

must be completed within the time limitation policy.

### **Repeating Courses**

Courses for which a grade has been awarded may be repeated only once. The grade of W does not replace a previously awarded grade. When the course is repeated, the student receives the credits for the course (counted once) and the higher of the two grades. Upon completion of the repeated course, a repeated course form must be submitted to Enrollment Services by the student. Grades for courses taken at other institutions may not be used to replace grades for courses completed at Towson. Courses taken for undergraduate credit may not be repeated for graduate degree credit.

### **Withdrawal from a Course**

When a student drops a course within the change of schedule period, no grade is recorded. If the course is dropped after the change of schedule period, but within the period to drop with the grade of W, the W grade will be recorded on the permanent record. Students who do not officially drop a course during the established time periods will receive the grade earned in the course (A, B, C, F) as determined by the instructor.

Students with documented medical problems or verified circumstances beyond their control may petition the associate dean of the Graduate School to drop a course after the established deadline and receive a grade of W. Documentation must accompany the petition. If approved, grades of W will be recorded for all unearned grades (FX). Earned grades (A, B, C, F) will not be changed.

### **Admission to a Second Program after Academic Dismissal**

A student academically dismissed from a degree program is not eligible to re-enter the same program, but may apply to another degree program. No additional admission requests will be accepted from a student academically dismissed from two programs. A

student academically dismissed from a degree program because of a low cumulative average may not utilize courses toward a degree that were taken prior to and including the semester in which the average fell below a 3.00.

### **Advising**

At the time of admission to a graduate program, the student is assigned a faculty adviser by the department responsible for the student's program of study. Registration for a newly admitted student begins with a visit to the academic adviser, who will assist the student with information about specific courses and degree requirements, and the development of a program of study. The student should consult with the adviser before registration each semester.

### **Program of Study**

Each degree student must follow a program which is approved by the student's adviser and the program director, and which conforms to Graduate School policy. Courses taken prior to planning the program of study can be included only if approved by the program director. The adviser's and the program director's approval are needed for any revisions. The program of study may include no more than three courses at the 500 level.

### **Change from One Degree Program to a Different Program**

Students may request a change of program at any time, but may not be enrolled in two master's degree programs concurrently. The request should be in writing to the Graduate School Office. The standing granted in the original program does not guarantee similar standing in the new program, which is entered subject to policies in effect at the time of the change.

Courses taken prior to the transfer may be utilized as part of the degree program if applicable. See "Transfer of Credit" policy for full details. All courses, including those taken in the earlier program and used in the new program, are calculated in the GPA considered for



graduation. The time limitation policy for completion of program requirements begins with the earliest course taken in the former program that is applied to the new program.

It is possible to return to the first program if the return is requested in writing within 60 days of the original request to change programs. The student may return to the original program after the 60-day period, subject to admission policies in effect at the time of the application to return.

### **Re-entry to a Degree Program after Lapse of Time Limitation**

For re-admission to the same or another degree program after the time limitation policy for completion of the degree has elapsed, the student's records are evaluated and admission is granted under current Graduate School policy. Previous course work will be reviewed by the program director. Up to 12 credits of courses taken while previously admitted may be applied to the degree if they are still part of the program curriculum and are approved by the program director. Any courses not approved must be repeated or replaced with additional courses approved by the program director.

### **Transfer of Credit**

A maximum of up to 50 percent of the credits required for a certificate or degree program may be transferred, subject to approval by the program director. The seven-year limitation cannot be extended for transfer credits within a certificate or master's program, and the 10-year limitation cannot be extended for transfer credits within a terminal or doctoral degree program. Courses taken prior to admission must have been taken at an accredited college or university, must be applicable to a graduate degree at the offering institution, and cannot be utilized if part of an already conferred bachelor's, master's or terminal/doctoral degree, unless variance is specified by an approved and/or accredited program of study. Where such variance is permitted, terminal or doctoral degree candidates may transfer in courses that have been conferred in a master's

degree, at the discretion of the program director. Courses taken as part of a post-baccalaureate certificate (in progress or completed) can be used toward a master's or terminal/doctoral degree if approved by the program director. Transfer courses must have been completed with a grade of B or higher. Pass/Fail or S/U grading is not acceptable.

### **Fees**

Tuition and other fees are subject to change without notice by action of the University System of Maryland Board of Trustees. Consult the current Schedule of Classes for most current fees. Rates for the 2001-2002 academic year are:

Application fee: (nonrefundable) \$40

Tuition

Undergraduate, per semester hour

In-state \$156

Out-of-state \$384

Graduate, per semester hour

In-state \$211

Out-of-state \$435

University fee per credit –

undergraduate (nonrefundable) \$51

University fee per credit – graduate

(nonrefundable) \$52

Lab/lab-lecture course fee \$50

(courses designated in the schedule of courses booklet as LAB or LLB)

Private music lessons:

(per credit hour plus tuition)

Major instrument \$100

Non-major instrument \$260

### **Payment of Fees**

All checks or money orders should be made payable to Towson University for the exact amount of the charges. The student's Social Security number must appear on all checks submitted to the university. The university has no deferred payment plans. The Discover, MasterCard and VISA credit cards can be used for tuition, fees, room, dining point plans and other charges. The university also offers Web credit card payment through TSINET (<http://onestop.towson.edu>). Full payment is required. It is imperative that students adhere

to published payment deadlines. If tuition, fees and related charges are not paid by the established payment date, the student's class schedule will be voided and, if applicable, residence hall space will be forfeited. If a check given in payment of fees, fines or services is returned unpaid by the bank for any reason, a penalty fee of \$50 is charged. Failure to reimburse the university for an uncollectible check may result in a student's class schedule being voided.

The financial policy set by the Board of Regents and supported by the legislative auditors of the state of Maryland requires that all previous balances be paid prior to registration for the following academic semester. The university employs a "first in/first out" method when applying payments to accounts. That is, payments are used to satisfy the oldest outstanding charge prior to applying any portion of a payment to current or more recent charges. Should the account of any student be sent to the Central Collection Unit of the state of Maryland because it is deemed delinquent, a 17 percent collection fee will be charged to the student. Students with outstanding balances should contact the Office of the Bursar. Transcript requests will not be honored if a student has a financial obligation to the university.

## FINANCIAL AID

### Office

Enrollment Services Center, Room 312  
t. 410-704-4236  
f. 410-704-2584  
<http://onestop.towson.edu/finaid/>

Graduate financial aid includes loans and employment, as well as a limited number of grants and scholarships. Funds for these programs come from the U.S. Department of Education, the state of Maryland, and Towson University. The objective of these programs is to help students pay the difference between the cost of education and the amount they can contribute.

The U.S. Department of Education calculates the Expected Family Contribution (EFC)

from the information that the student provides on the Free Application for Federal Student Aid (FAFSA). The EFC formula considers income, assets, family size and number of family members in college.

The cost of education includes direct costs such as tuition and fees and room and board as well as indirect costs including transportation and personal expenses.

## Student Eligibility

Factors that determine eligibility for aid include:

- financial need (except for unsubsidized loans)
- degree candidacy or formal admission as a regular student making satisfactory academic progress toward a degree or certificate
- U.S. citizen or eligible non-citizen status
- possession of a valid Social Security number
- certification that the applicant is not in default on a student loan and does not owe a repayment of a federal Title IV grant
- registration for the Selective Service

## Deadline and Application Procedures

All students must reapply for financial aid annually, and should do so as soon as possible after January 1. Students can apply for aid electronically at the U.S. Department of Education's [www.ed.gov/studentaid](http://www.ed.gov/studentaid) Web site, or they can request a paper FAFSA from the U.S. Department of Education by calling 1-800-4FED-AID.

Whether they apply electronically or by mail, students should complete the process by January 31 to meet the Towson University priority deadline of March 1. All students must list Towson University (code #002099) in Step Six of the FAFSA to allow the federal processor to transmit application results electronically to the Towson University Office of Financial Aid.

The Office of Financial Aid offers aid first to students whose applications are completed and received from the U.S. Department of Education by the March 1 deadline. Applications received after the March 1 deadline are

processed on a rolling basis, but late applicants should not expect consideration for limited campus-based funds.

### **Enrollment Requirements**

Generally, graduate students must take at least 6 graduate credits per semester to receive aid at the graduate level. Students will receive graduate level aid while taking undergraduate course work only if the courses are required for the student's graduate program.

### **Federal Perkins Loan**

The university offers loans from this campus-based Federal Title IV program first to students with exceptional financial need. Graduate students may receive up to \$6,000 per year. The statutory limit for total borrowing from this program is \$40,000, including all borrowing at the undergraduate level.

This federal loan has an annual interest rate of 5 percent, making this the lowest cost educational loan. Interest does not begin to accrue, and no payment of principal is due, until nine months after the borrower leaves school or drops below enrollment for at least 6 credit hours. Payments depend on the total amount borrowed, but will never be less than \$40 per month, plus interest.

### **Federal Work Study**

This Federal Title IV program allows students to work and earn money for educational expenses. The university pays aid from this program through paychecks every two weeks. The eligibility does not offset direct university charges such as tuition.

Students can find jobs on campus or in approved off-campus organizations and agencies. The university encourages students to consider off-campus jobs in community service organizations. Towson University's Career Center maintains a list of available Federal Work-Study positions.

### **Federal Direct Student Loan Program**

The application requirements for these long-term loans are the same as for other Federal Title IV programs. Borrowers must carry at least 6 graduate credit hours per semester.

Depending on the amount of need, an aid offer may include an interest-subsidized loan or an unsubsidized loan. Some students receive both subsidized and unsubsidized loans.

The chief difference between a subsidized loan and an unsubsidized loan is the point at which interest begins to accrue. No interest accrues on a subsidized loan until the end of a six-month grace period, which begins when the borrower graduates, withdraws or drops below enrollment for at least 6 credit hours. Interest on an unsubsidized loan accrues during enrollment, and throughout the grace period. The interest rate for Direct Loans is variable and capped at 8.25 percent.

All borrowers pay interest while in repayment. The repayment period begins at the end of the grace period.

All borrowers pay a loan origination fee of 3 percent to the U.S. Department of Education. The university must deduct this fee from the loan proceeds.

Direct loans have annual limits. Graduate students can borrow up to \$8,500 in subsidized loan funds, and up to \$10,000 in unsubsidized loan funds. No student can borrow more than the cost of education.

The aggregate loan limit for graduate students is \$138,500, including all loans made at the undergraduate level. No more than \$65,500 of the aggregate amount may be subsidized.

### **Loan Counseling Requirements for Borrowers**

New loan borrowers at Towson University of Federal Perkins Loans or Federal Direct Student Loans must complete entrance loan counseling. Borrowers who graduate or leave school must complete exit loan counseling sessions. These sessions provide borrowers with information on their rights and responsibilities.

New borrowers will find entrance and exit loan counseling for Direct Loans, as well as entrance counseling for the Federal Perkins Loan Program at <http://onestop.towson.edu/financial/>. The university's Office of Financial Services provides exit loan counseling for Perkins Loan borrowers.

## Additional Information

### Financial Aid Disbursements

Generally, students receive one half of academic year financial aid funds (except Federal Work-Study) each semester. The university will credit aid toward semester charges for tuition and fees and other direct university charges.

Whenever the amount of semester aid exceeds a student's charges to the university, the student has a credit balance. The student will receive any credit balance in a rebate check to use for books and day-to-day indirect educational expenses.

The bursar disburses rebate checks for credit balances no earlier than 10 days prior to the first week of classes each semester. A student can request that the Office of the Bursar convert a portion of his or her credit balance for retail points on the student's Towson University One Card for the purchase of books, or for use at any campus food location.

Any student who receives a late aid offer may not receive a check until at least three weeks after the creation of the credit balance. A student with a revised aid offer may also experience a delay in receiving a rebate check.

### Minimester

Students will not receive Federal Title IV or university financial aid for Minimester.

### Summer

A supplemental application is required for summer aid and is available from the Office of Financial Aid when the summer course schedule booklets become available. Summer aid is limited to loans from the Federal Direct Loan Program.

### Financial Aid Advising

Students can schedule appointments to speak with a Towson University financial aid adviser in person or by telephone. To schedule an appointment, call 410-704-4236.

### Refund Policy

When a student completely withdraws from Towson University while receiving Federal Title IV student aid, the Office of Financial Aid must determine what portion of the student's semester aid (not including Federal Work-Study funds) will revert to the federal programs. The Office of Financial Aid uses a statutory federal refund formula required by the U.S. Department of Education to determine what portion of aid paid to university charges has been "earned" and what portion must be considered "unearned."

The student returns unearned Title IV assistance minus the amount the university returns. The U.S. Department of Education does not allow discretion on the part of the university for non-institutional costs. In most cases, when a student receives Title IV assistance greater than the amount of institutional charges and completely withdraws from the university, the student will have to return some or all of those federal funds.

### Internet Services

The Office of Financial Aid has a comprehensive, interactive Web site, offering more than 200 pages of information. This Web site, at <http://onestop.towson.edu/finaid/>, allows students to receive many financial aid services electronically. Students can apply for financial aid and scholarships online, as well as visit dozens of recommended Web sites.

### Other Resources

#### Regular Student Employment

Various departments on campus hire students. Job boards located on the second floor of the University Union contain up-to-date information on current job openings.

#### Student Employment Program

This office helps students find part-time jobs in the Baltimore metropolitan area. For additional information, call 410-704-2730 or visit The Career Center in the Enrollment Services Center.



## Assistantships

The Graduate School offers a limited number of graduate assistantships to students who have recommendations from appropriate departments. The stipends for these on- and off-campus assistantships vary according to the length of employment and number of hours worked. The full stipend for 10 months is \$4,000. The assistant also receives a waiver of tuition for regular courses, prorated according to terms of the assistantship. Graduate assistants must perform appropriate work each week during the semester included in the assistantship. Call 410-704-4359 for detailed information and application forms.

## Fellowships

The College of Graduate Education and Research is committed to supporting students enrolled in doctoral and other terminal degree programs at Towson University. The purpose of the Towson University Graduate Student Fellowship program is to advance the goals of increased excellence and diversity of graduate students. Awards are made to students on the basis of academic merit and/or depth of professional experience. Detailed information may be obtained by calling the Graduate School Office, 410-704-2501, or by e-mailing [grads@towson.edu](mailto:grads@towson.edu).

## Grants and Scholarships

Towson University offers a limited number of need- and non-need-based scholarships and grants to graduate students. For more information, students should visit Towson University's online Scholarship Seeker at <http://onestop.towson.edu/finaid/>.

The Scholarship Seeker allows students to find Towson University and state of Maryland scholarships and grants to fit their individual qualifications. Students can view lists of potential scholarships, and link to detailed information about scholarship requirements and application procedures.

## State Scholarships

The state of Maryland offers scholarships and grants based on financial need or merit, or a combination of both. Legal residents of Maryland apply using the FAFSA or the Renewal FAFSA. The deadline is March 1.

Some state scholarships, such as teaching and child care scholarships, require special applications and have different deadlines. For more information about all state scholarships, students can call the Maryland State Scholarship Administration at 410-260-4565 or visit [www.mhec.state.md.us](http://www.mhec.state.md.us).

State of Maryland programs open to graduate students include the Senatorial Grant, the Delegate Grant, the State Nursing Scholarship and Living Expenses Grant, the Physical and Occupational Therapists and Assistants Grant, and Maryland Teacher Scholarships.

## Private Scholarships

Students who receive scholarships from private organizations outside the university (not including Maryland state scholarships) should contact the Office of the Bursar to arrange for payment of scholarship funds.

## GRADUATION REQUIREMENTS

### Eligibility for Graduation

Students must complete all program prerequisites, as well as all required and elective degree courses with a minimum average of 3.00 in all graduate work taken at Towson University as well as 3.00 in all courses included in the program of study. Students must also pass the master's degree written examination, if required by the particular program, and any additional oral and written examinations. All degree requirements including resolution of incomplete grades and the submission of final copy of the thesis (which must be delivered to the Graduate School) must be completed by the last day of classes of the semester in which the student is applying for graduation. The application for graduation must be filed by the published date. (See Academic Calendar.)



## Application for Graduation

The request for graduation review for a degree or certificate is submitted to the Graduate School Office. The deadline for submission of the application is published in the Academic Calendar (p. 1) and in the schedule booklet. If the application is submitted late, graduation is postponed until the next graduation date. All graduation requirements, including resolution of incomplete grades and acceptance of the completed thesis (if a thesis is undertaken), must be completed by the last day of the semester in which the student is applying for graduation. If the student does not complete requirements for graduation, the application must be resubmitted ~~during~~ <sup>FOR</sup> the semester in which graduation is intended.

## Thesis Procedure

Students intending to write a thesis should obtain the manual *Guidelines for Preparing the Master's Degree Thesis* from their program director or from the Graduate School Office. The manual is also available on the Graduate School Web site at [www.towson.edu/grad/gthesis.html](http://www.towson.edu/grad/gthesis.html). Students registering for thesis credit must have a special permission form from the Graduate School.

## Time Limitation for Completion of Degree Requirements

All requirements for a certificate or master's degree must be completed within a seven-year period. All requirements for terminal or doctoral degrees must be completed within a 10-year period.

## Upper-Division Courses

A maximum of three upper-division courses (500 level) may be included toward a master's degree.

## Grades of C

A maximum of two courses of C grades are allowed for graduation.

## Courses Taken as a Non-Degree Student

A limit of 12 credits may be used in a program if taken by non-degree students who later apply for degree status.

## Special Format Courses

In all degree programs, a limit of 12 credits is placed on workshops, independent study, travel and study, directed reading, or other special format courses.

## OTHER ACADEMIC POLICIES

### Towson University Policies

#### *Privacy Rights of Parents and Students*

Towson University is in compliance with Section 513 (protection of the rights and privacy of parents and students) and Section 514 (protection of pupil rights) of Title V - Education Administration of the Education Amendments of 1974. University policies on this issue are spelled out in detail in Appendix B.

#### *Nondiscrimination in Education and Employment*

Towson University is in compliance with Titles VI and VII of the Civil Rights Act of 1964, the Equal Pay Act of 1963, Title IX of the Education Amendments of 1972, Titles VII and VIII of the Public Health Service Act, Section 504 of the Rehabilitation Act of 1973, Section 303 of the Age Discrimination Act of 1975, Executive Order 11246/11375 and Article 64A (the Governor's Code of Fair Practices). In accordance with these laws, the university does not discriminate against any individual for reasons of race, color, religion, national origin, sex, age, political affiliation, marital status or condition of handicap in the admission of students, educational programs and activities, hiring of faculty or staff, or any terms and conditions of employment. The university is also in compliance with federal regulations regarding prohibition of discrimination

on the basis of veteran status. Information on these laws and copies of the Affirmative Action Plan of Towson University are available from the Affirmative Action officer.

#### *Maintenance and Disposition of Records*

Students who do not register within one year of admission must submit new admission credentials and application data if they subsequently take courses.

All student records, including academic records from other institutions, are part of the official file, and are retained subject to stated policies. They cannot be returned or duplicated for any purpose. Students should obtain their own copies of official credentials for advisory purposes and other personal uses.

#### *Confidentiality of Records*

In keeping with the Family Educational Rights and Privacy Act of 1974, Towson University respects the confidential relationship between the university and its students by preserving, to the maximum extent possible, the privacy of all records relating to its students. Records are kept only on matters relevant to the academic admission process and to the student's progress toward a degree. The records will not be disclosed except upon student's written request or with his or her written consent, under legal compulsion, or in carefully circumscribed instances based on clearly defined policies of Towson University (see Appendix B).

#### *Substance Abuse Policy*

Each student is expected to read and abide by the policies and regulations of Towson University concerning drug and alcohol abuse. The substance Abuse Policy is found in Appendix E.

## Graduate School Policies

### *Student Responsibility*

It is the responsibility of the student to become knowledgeable of, and to observe, all university policies, regulations and procedures. In no case will a waiver of requirements or an exception be granted because a student pleads ignorance of policy or regulation or asserts that he/she was not informed of a specific requirement by an adviser or other university authority. The student should become especially familiar with: (1) the regulations in this catalog, (2) the section presenting requirements for the degree sought, and (3) the offerings and requirements of the student's major department.

Policy for graduate study, as stated in this catalog, is in effect for all students admitted to a program for the 2001-2002 academic year, and is that under which the student operates through the term of his or her study toward completion of degree requirements (subject to the disclaimer in the next paragraph).

While the provisions of this catalog will ordinarily be applied as stated, the catalog and the information contained herein do not constitute a contract. Towson University reserves the right to change any provision listed in this catalog, including, but not limited to, academic requirements for graduation, without actual notice to individual students. Every effort will be made to keep students advised of any such changes. Information on changes will be available from advisers and in the dean's office. It is especially important to note that it is the individual student's responsibility to keep apprised of current graduation requirements for his/her particular degree program.

### *Academic Integrity*

Students are expected to maintain a high standard of academic integrity. Inappropriate classroom conduct, cheating and plagiarism may result in disciplinary action by the Graduate Studies Committee.

Instructors are responsible for maintaining the academic integrity of courses, and will initially handle problems of classroom conduct, cheating and plagiarism in a discussion with the student. Unauthorized assistance in preparing materials submitted as original work by the student constitutes a violation of academic integrity and results in action being taken. The instructor may lower the student's grade or give a failing grade for the course. If the instructor decides that further action is warranted, he or she will notify the student that a formal charge will be made to the Graduate Studies Committee. A written report of the incident will be filed with the committee.

The committee will review the facts of the case and make a decision regarding the status of the student. The committee will either absolve the student of the violation or impose a penalty. The penalty may be, but is not limited to, the following: (1) agreement that the lowered course grade is sufficient disciplinary action; (2) mandatory suspension from taking courses for graduate credit for a designated period of time; or (3) dismissal from the Graduate School.

### *Academic Standards, Appeals, Hearings and Grievances*

Matters of graduate academic standards are the responsibility of the Graduate Studies Committee. Appeals related to academic matters should be made to this committee by writing in care of the Graduate School dean.

Graduate School policy on procedures for appeals, hearings and grievances is found in Appendix E of this catalog.

In all cases involving disciplinary action, or other charges, procedures of due process are followed. Additional information may be found under the headings of "Graduate Studies Committee" and "Academic Integrity."

### *Exceptions to Academic Policies, Regulations or Requirements*

Exceptions to academic policies, regulations or requirements, as stated in this catalog or elsewhere, are rarely made, and then only for truly extenuating circumstances. A student who believes an exception is justified may petition the Graduate School. The request must state the specific exception being requested and the reasons for the request. For degree students, the program director must counter-sign the request, indicating his or her recommendation. In cases that involve faculty in addition to the program director, the coordinator forwards the request to the appropriate faculty member(s) for additional written recommendation. The signed request is then forwarded by the program director to the Graduate School. Non-degree students must petition the Graduate School directly.







## THE COLLEGE OF BUSINESS AND ECONOMICS

### VISION

CBE's vision is to be widely recognized as an Outstanding Undergraduate College of Applied Business and Economic Studies.

### MISSION

CBE's mission is to provide:

- a strong undergraduate business education for high achieving students... selected graduate programs based upon specific CBE strengths and needs
- a good balance of theory, application and personal development activities that create a challenging environment of integrated learning
- each student with the opportunity to meet the required "Profile of a CBE Graduate" through strong faculty who consistently demonstrate quality teaching, advising and important scholarly contributions in their fields of expertise
- a nurturing culture of high expectations that properly prepares each student for life beyond college
- a strong outreach program to create dynamic partnerships beyond the university for economic and societal development, academic linkages that enhance the teaching/learning environment throughout our college, and CBE's important inclusion in the fabric of the community.

Alan Leberknight, Dean  
 Albert Avery, Associate Dean  
 Sharma Pillutla, Assistant Dean  
 A. Samuel Penn, Executive-in-Residence  
 David A. DeCenzo, Director, Partnership Development  
 The Entire CBE Faculty and Staff

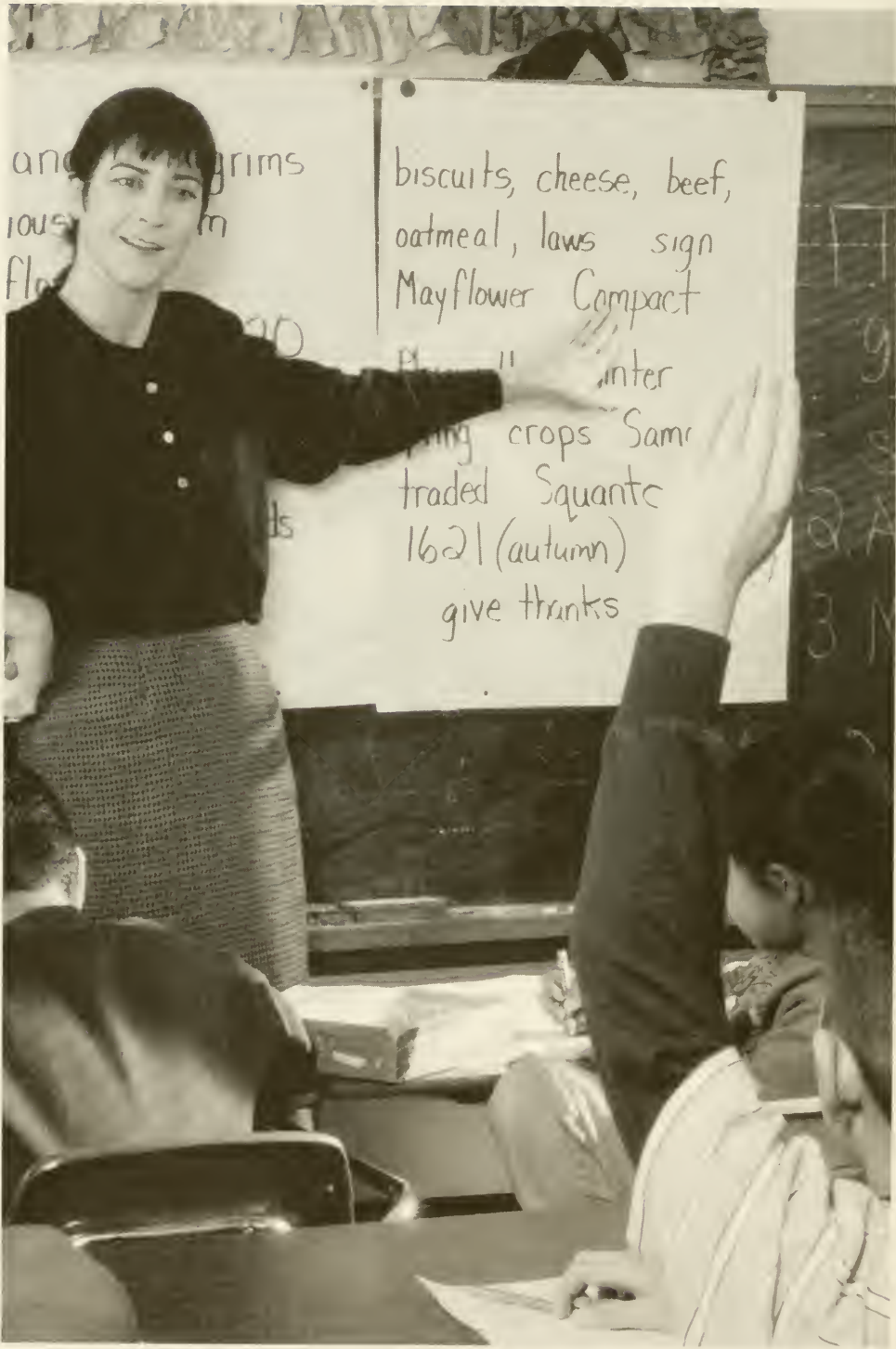
### COLLEGE OFFICE

Executive Administrative Aide: Phyllis Belt  
 Stephens Hall, Room 218  
 410-704-3343  
 Fax: 410-704-3664  
 E-mail: [pbelt@towson.edu](mailto:pbelt@towson.edu)  
[www.towson.edu/cbe](http://www.towson.edu/cbe)

### Certificate Program

Management and Leadership Development  
*(See Interdisciplinary Programs section)*





## THE COLLEGE OF EDUCATION

Towson University has a distinguished history in the preparation of classroom teachers and education specialists. As the first teacher-training institution in Maryland, Towson University has been preparing men and women for teaching careers for more than 130 years. Programs of study within the College of Education lead to the baccalaureate degree in education with certification in early childhood education, elementary education and special education. In addition, the college offers programs that lead to certification in secondary education and K-12 education, for those students enrolled in other colleges of the university. The college offers master's degree programs in early childhood education, elementary education, secondary education, instructional technology, school library media, reading, educational leadership, and teaching, as well as certification for Administrator I.

Programs of study within the college are constantly assessed and reorganized in order to provide students with three essentials for professional success: 1) a challenging general education in a variety of disciplines; 2) in-depth content knowledge in the field of teaching specialization; and 3) a professional education based upon current research and models of best practice.

The teaching faculty in the college is dedicated to providing a background in research on learning and methods of instruction which prepare teachers and education specialists as facilitators of active learning for diverse and inclusive populations in environments that are technologically advanced. To promote this goal, the faculty is committed to active partic-

ipation in the academic community as teachers, scholars and advisers. They use methods of instruction which emphasize active student learning through the integration of content knowledge with the study and practice of effective pedagogy.

Dennis Hinkle, Dean

Thomas Proffitt, Associate Dean

Roxana DellaVecchia, Assistant Dean

### COLLEGE OFFICE

Hawkins Hall, Room 301

410-704-2570

Fax: 410-704-2733

[www.towson.edu/coe](http://www.towson.edu/coe)

### Doctoral Degree Program

Instructional Technology

### Master's Degree Programs

Early Childhood Education

Elementary Education

Instructional Technology—School Library

Media

Reading

Secondary Education

Teaching

### Certification

Administrator I

*(See Interdisciplinary Programs section)*

- Human Resource Development,

Educational Leadership Track

- Post Master's Certification for

Administrator I

Reading Specialist



## COLLEGE OF EDUCATION VISION STATEMENT

The vision of teacher education at Towson University is to build upon its rich heritage and excellent reputation and to position itself to maintain a leadership role in academic program planning and public policy formulation. By maintaining this leadership role, teacher education can ensure that active learning occurs in diverse and inclusive educational environments where contemporary information resources are available. Thus, teacher education, in collaboration with other public/private agencies, can assist in the readiness of all learners to succeed in a rapidly changing, diverse and highly technical world. In order to achieve this vision, teacher education programs at Towson University are committed to:

1. Ensuring the mastery of appropriate content in general studies in the liberal arts and sciences
2. Reflecting upon and refining best practices — professional knowledge and skills — to develop a repertoire of instructional and assessment strategies
3. Preparing students for diverse and inclusive communities of learners through systematic exposure to heterogeneous populations
4. Utilizing appropriate technologies which reflect best practices in education
5. Helping develop, internalize and display professional conscience (a commitment to ethical practice, inquiry, knowledge competence, caring and social justice in a democratic society)
6. Developing collaborative partnerships with the public/private sector
7. Playing a leadership role in teacher education through scholarly endeavors

## MARYLAND WRITING PROJECT OFFICE

Hawkins Hall 403C, 410-704-3593

Director: Barbara Bass, 410-704-4573

Co-director: Linda De La Ysla, 410-704-4094

The Maryland Writing Project (MWP), a site of the National Writing Project, is housed in Towson University's College of Education. MWP is supported by the colleges of Education and Liberal Arts. Established in Baltimore in 1981, the MWP is a teacher-driven professional development organization for teachers across the content areas in grades pre-K through university. Its mission is to identify, train and support excellent teachers so that they can share with others their knowledge and experience in teaching writing and in using writing as a learning tool. Teachers participate in an invitational Summer Institute to become teacher-consultants. They research, develop and share best writing practices in order to effect change in their classrooms, schools and school systems.

The MWP offers both undergraduate and graduate courses. Maryland Writing Project teacher-consultants serve as instructors for EDUC 301 Writing and Communication Skills for Teachers. They also teach SCED 399 Differentiated Student Teaching, which is offered during the summer in conjunction with a camp for young writers called the Student Writers' Workshop. At the graduate level, MWP-trained teacher-consultants teach SCED 605, the 6-credit Summer Teacher Institute; EDUC 734, the Teacher Inquiry Institute; EDUC 667 Writing as Thinking; and EDUC 661 Responding to and Evaluating Writing. They also teach special topics courses at the graduate level throughout the year.

Finally, the MWP offers Maryland State Department of Education-approved, in-service professional development workshops in school systems across the state. The courses range in scope from daylong to yearlong classes.



## EARLY CHILDHOOD EDUCATION

Degree: Master of Education

Program Director: Edyth J. Wheeler

410-704-2460

ejwheeler@towson.edu

The M.Ed. in Early Childhood Education is an advanced degree program designed to prepare the degree candidate for a future professional role, to increase competence in a current career role, or to provide a step toward further study in the field of early childhood education. It is not an initial teaching certification or licensure program, but an opportunity for increased professional development at the graduate level. The M.Ed. in Early Childhood Education is recommended for practitioners in a wide range of programs for children from birth through age eight in a variety of community settings. Their roles may include administration, supervision and mentoring in early childhood programs; pre-elementary or primary grade teaching; family/community support; early intervention; resource and referral; program licensing; infants and toddlers specialist; as well as many others. Guiding principles include an interdisciplinary perspective, collaboration, mentoring and advocacy, with a foundation of the most current knowledge base in early childhood and best practice for all young children and families.

The 33-credit program consists of seven required courses and four elective courses, designed to provide each student with a deeper understanding of the knowledge base in the field, while supporting individual areas of professional specialization and academic interest. The faculty in the Department of Early Childhood Education has developed specific courses to support students in their professional development and in their future contributions to the field of early childhood education through their chosen career paths.

### Admission Requirements

- A baccalaureate degree from an accredited college or university.
- A minimum undergraduate GPA of 3.00 is required for full admission and 2.75 for

conditional admission to the program. All GPA calculations are based on the last 60 credits of undergraduate and post-baccalaureate study.

*One or more of the following:*

- Teacher certification in early childhood education.  
*or*
- Teacher certification in elementary education plus 6 credits in early childhood education.  
*or*
- A minimum of three years of experience as a teacher in an early childhood program serving young children from birth to age 5.  
*or*
- Undergraduate courses in the following areas:
  - educational psychology or psychology of learning
  - child growth and development
  - curriculum and methods in early childhood education

NOTE: Prerequisite listed courses above do not fulfill elective requirements for the degree.

- A current resume submitted with the application for admission as well as all post-secondary transcripts. Send to the program director.

NOTE: The M.Ed. in Early Childhood Education is an advanced program and does not lead to initial teacher certification in early childhood education. Individuals interested in post-baccalaureate initial certification should contact the early childhood education graduate director for further information.

### Degree Requirements

The Master of Education in Early Childhood Education requires a minimum of 33 credits, including the following:

- Completion of required prerequisite courses.
- Course work for the degree.

### Required Courses (21 credits)

EDUC 611 Teacher as Researcher (3)

ECED 609 Growth and Development of Young Children (3)

## 28 DEGREE AND CERTIFICATE PROGRAMS

- ECED 619 Assessment, Observation and Evaluation in Early Childhood Education (3)
- ECED 607 Learner Diversity and Inclusion in Early Childhood Education (3)
- ECED 665 Curriculum Theory and Development (3)
- ECED 610 Learning Environments: Curriculum and Technology (3)
- ECED 773 Seminar in Early Childhood Education (3)

### Electives (12 credits)

To be selected from departmental elective courses or up to 6 credits from another department with permission. No more than 6 credits of departmental elective courses may be taken at the 500 level.

### Grade Requirements

At least 9 credits of elective courses must be completed with a grade of A or B. All students must complete ECED 773 with the grade A or B. The course may be repeated.

### Course Sequence

The first 6 credits of the graduate program are ECED 611 Teacher as Researcher and ECED 609 Growth and Development of Young Children. These two courses must be completed before other courses are taken. The final, or capstone, course is ECED 773 Seminar in Early Childhood Education. In ECED 773, students are provided an opportunity to develop a creative and interdisciplinary statement of their professional identity, as they articulate their views on why they care about children and why they do what they do. All other course work must be completed prior to taking this course.

### Thesis Option

As an alternative to ECED 773, students may elect the ECED 898 Thesis in Early Childhood Education. This option is available for students who may wish to pursue doctoral studies at a later date or who have identified a strong commitment to a specific topic of inquiry they wish to pursue in great depth. Students who elect the Thesis Option will take the

6-credit ECED 898 Thesis in place of the 3-credit ECED 773 Seminar and 3 elective credits.

### Additional Degree Requirements

At the beginning of the program, each student will submit a Goals Statement. This document will serve as a guide to developing a plan so students can achieve their individual professional and academic objectives. Each student will successfully complete a capstone experience as an exit requirement to the program. The capstone experience will demonstrate integrated graduate-level learning and reflect the student's growth as a professional and leader in the chosen area of specialization in the field of early childhood education. One example of an individual culminating experience is the development of a preliminary portfolio for the National Board for Professional Teaching Standards certification.

### ELEMENTARY EDUCATION

Degree: Master of Education  
Program Director: Linda Emerick  
410-704-4251  
lemerick@towson.edu

The Master of Education in Elementary Education provides opportunities for graduate students in education to meet the challenges of a dynamic profession.

The program of study helps the student in the following areas:

- Developing advanced competencies in curriculum development and instructional design.
- Developing an understanding of the diverse nature of learners and society.
- Assuming leadership roles in the profession.
- Using technology to enhance learning.
- Understanding and using appropriate assessment and evaluation.
- Engaging in scholarly activities.

The goals and objectives of the degree program are based on the core propositions endorsed by the National Board for Professional Teaching Standards. The areas addressed by the standards are reflected in the required courses and elective course domains.

## Admission Requirements

- Certification as an elementary school teacher or permission of the program director.
- An overall minimum undergraduate GPA of 3.00 for full admission to the program, and a 2.75 GPA for conditional admission, based on the last 60 credits of total undergraduate and post-baccalaureate study.
- Maryland teaching certification or eligibility for teaching certification.

NOTE: This master's degree program is not accompanied by automatic state certification. Non-certified applicants should contact the director or their adviser prior to enrolling in course work.

## Degree Requirements

- Completion of required prerequisite courses.
- All students must complete ELED 775/SCED 781 Seminar, with a grade of A or B (the course may be repeated only once) or successfully complete ELED 898 Thesis.
- Completion of required courses and electives as specified below.

### Program of Study A: Master of Education with Thesis (33 credits)

#### Required Courses (18 credits)

ELED/ECED 665/	
SCED 741	Curriculum Theory and Development (3)
EDUC 560	Teaching in a Multicultural/Multiethnic Society (3)
EDUC 605	Research and Information Technology (3)
EDUC 761	Research in Education (3)
ELED 898	Master's Thesis in Elementary Education (6)

#### Electives (15 credits)

A minimum of three elective courses (9 credits or more) that are taken must be designated as elementary education (ELED). Students may select electives from other departments in consultation with their adviser. A maximum of 6 credits may be taken at the 500 level.

### Program of Study B: Master of Education with Seminar (33 credits)

#### Required Courses (15 credits)

ELED/ECED 665/	
SCED 741	Curriculum Theory and Development (3)
EDUC 560	Teaching in a Multicultural/Multiethnic Society (3)
EDUC 605	Research and Information Technology (3)
EDUC 761	Research in Education (3)
ELED 775/	
SCED 781	Seminar (3)

#### Electives (18 credits)

A minimum of three elective courses (9 credits or more) that are taken must be designated as elementary education (ELED). Students may select electives from other departments in consultation with their adviser. A maximum of 6 credits may be taken at the 500 level.

### Suggested Electives for Programs of Study A and B

NOTE: Electives not listed below and from other departments may be selected with prior permission of the adviser.

#### Track I: Curriculum and Instruction

ELED 647	Advanced Processes of Teaching and Learning
ELED 648	Differentiating Instruction for All Learners
ELED 601	Critical and Creative Thinking
ELED 611	Principles and Processes of Language and Literacy
ELED 613	Reading and Other Language Arts in the Elementary School
ELED 685	Seminar in Social Studies
EDUC 601	Concepts and Issues in Education
SCED 518	Young Adult Literature
SCED 623	The Middle School
SCED 625	Teaching in the Middle School
SCED 751	Seminar in the Middle School Curriculum
ISTC 667	Instructional Development
ELED 670-1	Special Topics

## 30 DEGREE AND CERTIFICATE PROGRAMS

### Track II: Diversity and Learning

- ELED 557 English for the Non-English Speaking Child
- ELED 6xx Travel and Study: Elementary Education
- ELED 631 Educating the Gifted
- ELED 640 Discipline and Management in the Elementary School
- EDUC 646 Human Relations and the Professional
- ECED 609 Growth and Development of Young Children
- SPED 637 Mainstreaming for the Classroom Teacher
- ISTC 633 Applied Psychology of Learning
- ELED 670-1 Special Topics

### Track III: Leadership and Technology

- HRD 644 Team Building
- EDUC 603 School Law
- ELED (711) Staff Development and Leadership
- ELED 716 Administration of the Schools
- ELED 781 Seminar in Supervision
- EDUC 745 School Budgeting and Fiscal Planning
- ECED 615 Administration and Supervision of Programs for Young Children
- ISTC 541 Computer Technology and Utilization
- ISTC 702 Educational Leadership and Technology
- ISTC 687 Computer-based Instruction
- ELED 670-1 Special Topics

### Track IV: Assessment and Evaluation

- ELED 621 Literacy Assessment in the Elementary Classroom
- EDUC 607 Home, School and Community
- EDUC 762 Introduction to Educational Evaluation
- ECED 619 Assessment, Observation and Evaluation in Early Childhood Education
- ELED 670-1 Special Topics

### Track V: Scholarly Inquiry

- ELED 695 Independent Study in Education: Elementary
- ELED 797 Internship in Educational Leadership
- SCED 605 Theory, Research and Practice in Teaching Composition
- ELED 670-1 Special Topics
- EDUC 611 Teacher As Researcher

## INSTRUCTIONAL TECHNOLOGY (Ed.D.)

Degree: Doctor of Education

Program Director: Paul Jones

410-704-2568

pjones@towson.edu

The new doctorate in Education (Ed.D.) in Instructional Technology will begin offering courses in the fall of 2002. The program focuses on the development of instructional technology expertise to meet the present and future needs of technology integration in instruction across the educational spectrum. There are four tracks in the Ed.D. program: 1) Instructional Design, 2) Educational Technology, 3) Technology and Literacy and 4) Learning and Teaching. The main emphasis of this doctoral program will be to create highly skilled professionals who are able to lead educational organizations to make effective decisions about the appropriate uses of technology in learning and teaching.

The Ed.D. in Instructional Technology requires 60 graduate credits beyond the master's degree. Course work in the program includes 15 credits in the Instructional Technology Core, 9 credits in research methodology, 15 credits in one of the four specialization tracks, 3 credits of technology internship, 6 credits of doctoral seminar and 12 credits of dissertation research. The program will have a major online presence. Some of the online features will include Web-based resources, case-based learning online, interinstitutional-sharing of class resources and online discussions.



## Admission Requirements

- A master's degree in instructional technology or related field.
- Names of two professional references familiar with applicant's academic work.
- Letter of application.
- Academic writing sample.
- Submission and approval of a digital portfolio that demonstrates the integration of technology into their field of expertise (such as instruction or training).
- A GPA of 3.00 or above on all graduate degree work.
- Graduate Record Exam.
- International students must have TOEFL scores of at least 550.

For more information, contact the Graduate School, 410-704-2501.

## INSTRUCTIONAL TECHNOLOGY (M.S.)

Degree: Master of Science

Program Director: David Wizer

410-704-6268

wizer@towson.edu

The Instructional Technology Program in the College of Education is an applied professional program that helps to educate leaders in three technology fields: training and development, school library media, and educational computing and media.

The Instructional Technology graduate program is intended for both current professionals in the fields of media, design, computing, education and libraries as well as those who are seeking advanced degrees and an upgrade in their skills and knowledge base related to technology. The program is hands-on and practical with a considerable focus of most courses being inventive and authentic learning projects.

Students select one of three options. The first, Instructional Design and Development, offers a flexible program of study designed to develop competencies in instructional design and media-related competencies for those who wish to work in training or instructional settings in business, industry, government, the

military, or medical education. The second, School Library Media, meets the Maryland State Department of Education requirements for the Media Generalist Certification and is designed for students who wish to serve as directors of school library centers. The third, Educational Technology, is designed for those who wish to integrate technology into classroom teaching or to coordinate the planning and integration of educational technologies at the school, district or state level.

The program is most often completed by students on a part-time basis, although full-time study is encouraged. A majority of the graduate students in the Instructional Technology program are full-time working professionals who take classes in the late afternoon or early evening. Professionals seeking to advance or change careers comprise a substantial portion of the student population in the Instructional Technology program. These include students who intend to become school library media specialists, industry training specialists, and leaders in educational computing and technology.

## Admission Requirements

### Concentration I—Instructional Design and Development

*No prerequisite course requirements.*

### Concentration II—School Library Media

*Completion of the following courses or their equivalents:*

- PSYC 201 Educational Psychology (3)  
 SCED 319 Survey of Educational Programs (3)  
*One of the following:*  
 EDUC 401 Foundations of Education (3)  
 EDUC 502 History of Education (3)  
 EDUC 405 Philosophy of Education (3)

*Completion of the following courses or their equivalents:*

- ISTC 301 Utilization of Instructional Media (3)  
 ISTC 471 Reference and Information Sources (3)  
 ISTC 473 Cataloging and Classifying Media (3)

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### Track III—Educational Technology

Maryland State Department of Education certification as a classroom teacher, administrator or specialist.

*Completion of the following course or its equivalent:*

ISTC 301/501 Utilization of Instructional Media (3)

- A minimum undergraduate grade point average of 3.00 for full admission, and 2.75 for conditional admission. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.
- Technological literacy including the ability to use application programs is a necessary background requirement for Concentration I and Track III, and is strongly encouraged for Concentration II.

### Degree Requirements

- Completion of Concentration I, II or Track III courses.

Concentration I—Instructional Design and Development

Plan A: Master of Science with Thesis (minimum 36 credits)

### Required Courses (30 credits)

ISTC 541 Computer Technology and Utilization (3)  
ISTC 633 Instructional Video (3)  
ISTC 635 Theory and Design of Computer-based Instruction (3)  
ISTC 655 Media Design and Production I (3)  
ISTC 663 Applied Psychology of Learning (3)  
ISTC 667 Instructional Development (3)  
ISTC 685 Research in Instructional Technology (3)  
ISTC 687 Computer-based Instruction (3)  
ISTC 898 Master's Thesis in Instructional Technology (6)

### Electives (6 credits)

Selection of elective courses must be made with the advice and approval of a program

adviser. The elective credits may be in instructional technology. Three credits may be outside the department.

At least 27 credits must be at the 600-700 levels.

Plan B: Master of Science without Thesis (minimum 36 credits)

### Required Courses

*(except for thesis the required courses are identical to Plan A)*

### Electives (12 credits)

Selection of elective courses must be made with the advice and approval of a program adviser. All elective credits may be in instructional technology. With prior permission based upon a written rationale, up to 9 credits may be outside the department.

At least 27 credits must be at the 600-700 levels.

Concentration II—School Library Media

Plan A: Master of Science with Thesis (minimum 36 credits)

### Required Courses (27 or 30 credits)

EDUC 517 Children's Literature and Other Materials for Reading and Language Arts in Elementary School (3)  
ISTC 601 Organization and Administration of Media Center Programs (3)  
ISTC 615 Media Selection (3)  
ISTC 655 Media Design and Production (3)  
ISTC 667 Instructional Development (3)  
ISTC 685 Research in Instructional Technology (3)  
ISTC 789 Graduate Practicum in Instructional Technology (3 or 6)  
ISTC 898 Master's Thesis in Instructional Technology (6)  
SCED 518 Young Adult Literature (3)  
SPED 637 Mainstreaming for the Classroom Teacher (3)

**Electives (0-3 credits)**

At least 27 credits of courses must be at the 600-700 levels.

**Plan B: Master of Science without Thesis**  
(minimum 36 credits)

**Required Courses**

*(identical to Plan A, except for the deletion of ISTC 898 Master's Thesis in Instructional Technology (6))*

**Electives (6-9 credits)**

At least 27 credits of courses must be at the 600-700 levels.

**Track III—Educational Technology****Required Courses (24 credits)**

EDUC 605	Research and Information Technology (3)
ISTC 617	Distance Education in Theory and Practice (3)
ISTC 655	Media Design and Production (3)
ISTC 667	Instructional Development (3)
ISTC 685	Research in Instructional Technology (3)
ISTC 687	Computer-based Instruction (3)
ISTC 702	Educational Leadership and Technology (3)
ISTC 797	Graduate Internship in Instructional Technology (3)

**Electives (12 credits)**

ISTC 553	Instructional Photography (3)
ISTC 605	Web-based Instruction (3)
ISTC 633	Instructional Video (3)
ISTC 635	Theory and Design of Computer-based Instruction (3)
ISTC 663	Applied Psychology of Learning (3)
ISTC 898	Master's Thesis in Instructional Technology (6)
EDUC 730	Learning Principles for Teachers (3)
EDUC 731	Understanding the Curriculum K-12 (3)

**READING**

Degree: Master of Education

Program Director: Barbara Laster

blaster@towson.edu

The Master of Education in Reading program is designed to prepare reading specialists, primarily for K-12 education, but also for community colleges, industry, adult education programs, commercial education centers, and private practice. The 33-credit program is highly structured with eight required courses and three electives. It is developmental in design. Students grow in both their knowledge and application as they proceed through the program.

The Graduate Reading Program at Towson University does not subscribe to a particular position on reading. It closely reflects the broad, comprehensive knowledge and skills outlined in the 1998 Standards for Reading Professionals developed by the International Reading Association.

The goal of the Master of Education in Reading program is to prepare reading specialists who have a dynamic understanding of the reading process and who have a wide array of resources for enhancing literacy for all learners.

The program is designed to prepare the degree candidate to:

- Provide specialized literacy instruction and assessment, in cooperation with other professionals, to students at all levels.
- Provide literacy services to students in compensatory or special education programs.
- Communicate with parents and the community about literacy issues.
- Provide instructional guidance to paraprofessionals.
- Conduct in-service workshops on literacy topics.
- Read and interpret literacy research.
- Continue to grow professionally by reading professional journals and by participating in reading conferences and workshops.

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The Master of Education in Reading program is grounded in five philosophical beliefs:

- Literacy learning involves not only reading, but also writing, listening, speaking and viewing.
- Literacy instruction must be research-based and therefore requires reading specialists to be competent in interpreting and applying research findings.
- Literacy instruction must be responsive to the individual differences among learners.
- Literacy instruction must be inclusive and celebrate the diversity of learners.
- Literacy instruction and assessment must be closely connected so that instruction is developed, monitored and modified using multiple sources of assessment data.

The Master of Education in Reading program can be completed on a full-time or part-time basis. Most courses are offered in the early evening (e.g. 4:20-6:50 p.m.) one night a week. All eight required courses are offered in both fall and spring semesters and many are offered during the summer.

### Admission Requirements

Candidates for admission to the Master of Education in Reading program must meet the criterion for admission to all graduate programs at the university: a 3.00 GPA for the last 60 credits of undergraduate and post-baccalaureate study. Students can be admitted conditionally to the Master of Education in Reading program with a 2.75 GPA. Those admitted conditionally must receive an A or B in the first three REED courses they take in the program. Candidates who completed their bachelor's degree more than 10 years ago with less than a 3.00 can be admitted to the program by documenting five years of successful work experience.

Candidates in the M.Ed. in Reading program are not required to have or be eligible for a teaching certificate. This is to allow individuals interested in careers that do not require a state teaching certification (e.g., community college developmental reading) to pursue the degree. It is, however, important to understand that completing the M.Ed. in Reading does

not carry automatic state certification. Maryland State Certification for Reading Specialist has three requirements:

- Eligibility for teacher certification in early childhood, elementary, secondary or special education.
- Three years of classroom teaching experience.
- An M.Ed. in Reading from an approved program (e.g. Towson University's) or a master's equivalency.

### Required Courses (24 credits)

REED 601	Reading Theory and Practice (3)
REED 609	Reading Assessment (3)
REED 621	Reading Disabilities (3)
*REED 626	Clinic Internship in Reading (3)
REED 663	Literature-based Instruction in the Language Arts (3)
REED 665	Teaching Reading and Writing in the Content Areas (3)
*REED 726	Advanced Internship in Reading (3)
REED 729	Seminar in Reading (3)

\*There are two required internships in the program, REED 626 Clinic Internship in Reading, and REED 726 Advanced Internship in Reading. They are both 3-credit experiences that require 45 contact hours with clients, parents and fellow clinicians each semester. Students enrolled in REED 626 are assigned two clients. REED 726 students are assigned one client. In addition to working with one client, the students enrolled in the advanced internship are responsible for providing parent and paraprofessional workshops on a variety of topics as well as serving as coaches for the paraprofessionals.

### Electives (9 credits)

There is considerable flexibility in elective course selection in order to meet the unique program needs of individual candidates. Suggested courses include (but are not limited to) the following:

PSYC 611	Developmental Psychology (3)
ECED 609	Growth and Development of Young Children (3)



- ELED 557 English for the Non-English Speaking Child (3)
- ELED 601 Developing Critical, Creative and Problem-solving Thinking
- EDUC 560 Teaching in a Multicultural/Multiethnic Society (3)
- REED 605 Maryland School Performance Program: Reading and Writing Assessment and Instruction (3)
- REED 624 Methods and Materials for Teaching Reading in Higher Education (3)
- REED 670 Special Topics in Reading Education (3-6)
- REED 695 Individualized Study in Reading Education (3-6)
- SPED 513 Assistive Technology for Students with Disabilities (3)
- SPED 541 Curriculum/Methods for Instruction for Students with Disabilities (3)
- SPED 637 Mainstreaming for the Classroom Teacher (3)
- SCED 557 Methods of Teaching English as a Second Language (3)
- SCED 560 Using Reading and Writing in the Secondary School (3)
- SCED 605 Theory, Research and Practice in Teaching Composition (6)
- SCED 611 Inclusion/Integration Strategies for Special Needs Adolescents and Adults (3)
- SCED 625 Teaching in the Middle School (3)
- ADED 587 Teaching the Adult Learner (3)
- ISTC 501 Utilization of Instructional Media (3)

### Program Exit Requirements

Students must earn the grade of A or B in REED 726 and REED 729. Each course may be repeated once, if necessary. Students not earning an A or B in each course are dismissed from the program.

### SECONDARY EDUCATION

Degree: Master of Education

Program Director: Elizabeth Wilkins-Canter  
410-704-4956

ewilkinscanter@towson.edu

The Master of Education in Secondary Education aims to provide middle and high school teachers with current research on teaching and learning, new techniques and procedures for teaching and evaluation, as well as an opportunity for advanced study in their content fields.

This program is intended for middle school and high school teachers seeking advanced professional certification from the Maryland State Department of Education.

Students may select courses among the following five fields to meet their specific needs: technology, research related to teaching/learning, administration, special education, or advanced work in their teaching (content) area.

Completion of the master's program will enable the graduates to renew their teaching certification as middle or high school teachers in their content fields. School districts pay higher salaries to teachers who have completed a master's degree program.

The required core of six courses provides an update in technology, curriculum, current trends and issues in education, teaching/learning strategies and research methodology.

A thesis is optional. Students may elect to design and conduct a research project based on an educational problem approved by the university's Institutional Review Board instead of choosing the thesis.

The degree can be completed through part-time study. The majority of secondary Master of Education candidates are teaching, employed full-time in area middle and high schools. Courses are offered in the late afternoons, evenings, weekends and summers.

**Admission Requirements**

- Undergraduate content field major (English, chemistry, etc.).
- Completion of the education courses required by the Maryland State Department of Education.
- A 3.00 GPA for full admission; 2.75 GPA for conditional admission. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.
- Certification by the Maryland State Department of Education as a middle or high school teacher.

**Degree Requirements**

**Education Non-Thesis Plan (minimum 33 credits)**

**Required Courses (18 credits)**

EDUC 601	Concepts and Issues in Education (3)
EDUC 605	Research and Information Technology (3)
EDUC 761	Research in Education (3)
SCED 647	Advanced Teaching and Learning Processes (3)
SCED 741	Curriculum Development in the Secondary School (3)
SCED 781	Research Seminar in Secondary and Adult Education (3)

**Electives (15 credits)**

At least 6 credits must be selected from courses numbered 600 to 799. All electives are planned in terms of the needs and goals of the individual student and must be approved by the adviser.

**Thesis Plan (minimum 33 credits)**

**Required Courses (21 credits)**

EDUC 601	Concepts and Issues in Education (3)
EDUC 605	Research and Information Technology (3)
EDUC 761	Research in Education (3)
SCED 647	Advanced Teaching and Learning Processes (3)

SCED 741	Curriculum Development in the Secondary School (3)
SCED 898	Master's Thesis in Secondary Education (6)

**Electives (12 credits)**

At least 3 credits must be selected from courses numbered 600 to 799. All electives are planned in terms of the needs and goals of the individual student and must be approved by the adviser.

All students must pass SCED 781 with the grade of A or B (each course may be repeated once) or successfully complete SCED 898, Thesis.

NOTE: Any applicant not certified as a secondary teacher should be aware that completion of the master's degree is not accompanied by automatic state certification. Non-certified applicants should contact their advisers prior to enrolling for any course work.

**TEACHING (M.A.T.)**

Degree: Master of Arts in Teaching  
Program Directors:

Early Childhood: Edyth J. Wheeler  
410-704-2460  
ejwheeler@towson.edu

Elementary: Barbara Maestas  
410-704-2611  
bmaestas@towson.edu

Secondary: Deborah Piper  
410-704-4935  
dpiper@towson.edu

The Master of Arts in Teaching (M.A.T.) is an option for those without formal training in the field of education who wish to enter the teaching profession. It is well suited to recent graduates in the liberal arts and to those seeking to change careers. A graduate of this program will meet state certification teaching requirements at the early childhood (PK-3rd grade), elementary (1st-8th grade) or secondary (5th-12th grade) level. The program may be completed as a full-time or part-time program. The full-time (one-year) program

requires a full-time commitment to courses and field placement. The program will encompass a summer session, fall semester and an extended spring semester.

The part-time program may be completed in two years by taking two courses per semester (fall, spring and summer). Part-time students must also be able to participate in a minimum of 8 hours in field experiences per course each semester and become full-time for their Internship semester (extended final semester).

### Admission Requirements

- A baccalaureate degree with an appropriate undergraduate major in the liberal arts or arts and sciences. Secondary certification requires a minimum of 36 credits in a content major, such as math, science or English. Early Childhood and Elementary Education certification requires a well-rounded liberal arts background including courses in science, mathematics, English and social studies.
- A 3.00 GPA is required for full admission. A GPA between 2.75 and 2.99 will qualify the applicant for conditional admission. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.
- Passing scores (as determined by MSDE) on PRAXIS I exam (reading, writing and mathematics) must be submitted for acceptance into the program.
- An interview with the program director may be required.
- A brief admission essay in which the applicant discusses reasons for entering the teaching profession. Send directly to the program director.
- Two letters of reference. Use the Recommendation Form found in the Graduate School Application Packet and send recommendations to the program director.
- A vita or resume. Send directly to the program director.
- Application and all admission credentials must be submitted by October 31 for full-time applicants. Late applications only will be considered if space is available. Part-time students may apply year round.

**NOTE:** Degree requirements are subject to change for those students entering summer of 2001. Please contact the adviser for updated requirements.

### Degree Requirements

Forty-one credits of course work are required to complete the M.A.T. program for Secondary Education certification. Forty-six credits of course work are required to complete the M.A.T. program for Early Childhood or Elementary Education certification. The required courses are:

*For all certification programs:*

EDUC 605	Research and Information Technology (3)
EDUC 730	Learning Principles for Teachers (3)
EDUC 731	Understanding the Curriculum K-12 (3)
EDUC 733	Teaching Models, Processes and Classroom Management (3)
EDUC 734	Teacher as Researcher (3)
EDUC 735	Proseminar: Problems and Issues (3)
EDUC 798	Graduate Practicum (10)
SPED 637	Mainstreaming for the Classroom Teacher (3)

*Additional requirements for secondary certification:*

SCED 560	Using Reading and Writing in the Secondary School (4)
SCED 561	Teaching Reading in the Secondary Content Areas (3)
Secondary Education Methods Course (varies by content area specialization)	

*Additional requirements for early childhood and elementary certification:*

EDUC 717	Children's Literature and Other Materials to Teach Reading (3)
EDUC 787	Internship in Teaching Reading (3)
REED 601	Reading Theory and Practice (3)
REED 609	Assessment in Reading (3)
MATH 621	Seminar in Teaching Elementary and Middle School Mathematics (3)





## THE COLLEGE OF FINE ARTS AND COMMUNICATION

The College of Fine Arts and Communication provides graduate education in art education, studio art, communications management, mass communication, music education, music performance and theatre arts. The programs in the departments of Art, Mass Communication and Communication Studies, Music and Theatre Arts offer training and practical experience in their respective fields, enabling students to enhance their creative and analytic abilities. The programs provide opportunities for students to gain the detailed knowledge, skills and experience needed to begin or advance careers or to enter doctoral programs.

The College of Fine Arts and Communication maintains facilities that assist students and faculty in activities supporting curricular offerings. These include the Center for the Arts with a Concert Hall, Mainstage Theatre, Studio Theatre, Holtzman Art Gallery, Asian Arts & Culture Center, and many rehearsal and practice rooms; art studios and computer labs; the University Union Art Gallery; Burdick Hall with facilities for dance; Stephens Hall Theatre, providing performance space for dance, opera and musicals; and Van Bokkelen Hall and the Media Center, housing journalism and photojournalism laboratories, the debate and speech facility, WTMD-FM, WTSR-AM, WMJF-TV, and radio-television-film laboratories.

Noted as a fine arts center for Maryland, the college continues to pursue its mission to enhance communication and the fine and

performing arts through new programs such as the Arts Integration Institute at Towson University, whose mission is to assist Maryland K-8 educators in facilitating student growth and development through the arts. The college also sponsors international exchange programs with schools in China, Germany, Korea, Russia, Italy and the United Kingdom. The college contributes to the cultural life of Towson and the metropolitan area by offering more than 400 performances, exhibitions, film and video screenings, debates, lectures, and workshops each year.

Maravene Loeschke, Dean  
Charles Flippen, Associate Dean

### COLLEGE OFFICE

Center for the Arts, Room 394B  
410-704-3288  
Fax: 410-704-6026  
[www.towson.edu/tu/finearts](http://www.towson.edu/tu/finearts)

### Master's Degree Programs

Art Education  
Art, Studio  
Communications Management  
Music Education  
Music Performance/Composition  
Theatre

### Certificate Programs

Music  
Strategic Public Relations and Integrated Communications

## ART EDUCATION

Degree: Master of Education  
 Program Director: Jane Bates  
 410-704-2797  
 jbates@towson.edu

The degree program is designed to provide advanced training in art education, to promote the professional growth of art educators through individual research, and to increase the art educator's skill and knowledge in art production, art history, aesthetics and art criticism. The 33-hour program consists of 15 credits of required course work and 18 credits of electives. Students may select one of three elective tracks in pursuit of individual goals.

### Admission Requirements

- An undergraduate degree in art education and/or certification as a public school art teacher.
- A minimum grade point average of 3.00 for full admission, 2.75 for conditional admission, or 2.50 for provisional admission. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.

### Degree Requirements

In an effort to provide for diverse interests and ensure flexibility, the program offers three elective tracks (18 credits):

#### Broad-based Studio Track

This track is designed to enhance K-12 art teaching. Students select a variety of courses drawn from studio, art history and art education areas.

#### In-depth Studio Track

This track is designed for those concentrating their electives in a studio area. Students apply to work with a studio mentor.

#### Historical Track

This track is designed for those interested in pursuing cultural/historical aspects of art and art education. Students concentrate electives in art history.

Courses numbered 600 to 799 should ordinarily be selected, but a maximum of 9 credits in 500-level courses may be taken with the approval of the student's adviser. Six credits may be taken in departments other than art with prior approval.

Regardless of which elective track is selected, all students are required to complete a written thesis project in art education, the writing of which is done in the following courses: (Students must pass these courses with a grade of A or B for credit).

- |          |  |
|----------|--|
| ARED 798 | Art Education Thesis Project I (3-6) (offered in the spring and summer semesters)<br>Prerequisite: ARED 797. |
| ARED 799 | Art Education Thesis Project II (3) (offered in the fall semester) Prerequisite: ARED 798.                   |

### Additional Course Requirements

- |          |   |
|----------|---|
| ARED 799 | Seminar in Art Education (3) (offered in fall semester) |
| EDUC 601 | Concepts and Issues in Education (3)                    |
| PSYC 611 | Developmental Psychology (3)                            |

## ART, STUDIO

Degree: Master of Fine Arts  
 Program Director: Stuart Stein  
 410-704-2801  
 sstein@towson.edu

The Master of Fine Arts degree at Towson University is designed to meet the needs of those who wish to pursue the study of art, either for a career as an artist, or as a college-level instructor. The program consists of professional study in painting, photography, digital media, graphic design, illustration, sculpture, printmaking, ceramics, jewelry or interrelated media. M.F.A. students are encouraged to attend full time, but may attend part time for part or all of their degree work. The M.F.A. student enrolled full time also maintains a residency in the Department of Art, working in an assigned studio space.

The Department of Art fosters an M.F.A. program that draws from all aspects of a diverse and comprehensive curriculum. M.F.A. students study within a specific concentration while also being able to choose from a wide variety of learning experiences. The conceptual and ideological bases for artistic endeavors are explored through art history, graduate seminars and weekly critiques. The goals of the M.F.A. program are to direct the M.F.A. student to explore, focus and excel. Through conceptual and ideological dialogue, as well as the availability of technical expertise, the M.F.A. student at Towson is directed toward thematic consistency. While the postmodern environment encourages the integration of new technologies, interdisciplinary approaches and multicultural influences, the need to focus ideas within this climate is foremost in the mentoring of developing artists in the M.F.A. program.

Applicants to the M.F.A. program who are denied admission but display outstanding potential may be invited to participate in post-baccalaureate studies in studio art as pre-admission course work for the M.F.A. program in Studio Art. Upon successful completion, these studies guarantee acceptance into the M.F.A. program in Studio Art.

### Admission Requirements

- A baccalaureate degree, preferably in art.
- A minimum grade point average of 3.00 for full admission, 2.75 for conditional admission, or 2.50 for provisional admission. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.
- The following credentials must be sent directly to the graduate school program director of the studio art program:
  - A letter of intent: statement of your objectives.
  - A current resume.
  - Two letters of recommendation.
  - A slide portfolio of work: 20 labeled 35mm color transparencies enclosed in a plastic slide sheet.

The application deadline is March 15 for fall admission and November 1 for spring admission.

### Degree Requirements

*Completion of 60 credits of degree work:*

- 24 credits of 600- and 700-level studio art courses in a selected area of study
- ART 783 M.F.A. Seminar (3)
- Art history (9 credits)
- Elective art courses (6 credits selected with the consent of the adviser from approved graduate courses)
- Electives (9 credits selected with the consent of the adviser from any discipline)
- Final Semester
  - ART 785 M.F.A. Studio II (3)
  - ART 896 M.F.A. Project (6)
- Students are required to participate in both a midterm and end-of-term review of their work each semester. Students failing the midterm review will have until the end-of-term review to make necessary adjustments. The review committee has the right to recommend dismissal from the program if it is deemed necessary.

### COMMUNICATIONS MANAGEMENT

Degree: Master of Science

Program Director: Mark McElreath

410-704-3803

[mmcelreath@towson.edu](mailto:mmcelreath@towson.edu)

The Master of Science in Communications Management is an interdisciplinary program in mass communication, communication studies, marketing and management. It focuses on how to manage and appropriately integrate a variety of communication functions. The program seeks to help students gain the knowledge and skills to research, plan, implement and evaluate communication activities designed to achieve organizational goals.

The Master of Science in Communications Management examines both internal and external organizational communication, including employee communication, advertising, marketing, public relations and integrated communication. It is designed for both career-

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oriented individuals who want to advance in their chosen fields and for students who intend to pursue doctoral studies. Students should work with the program director to identify the best combination of courses to meet their specific needs.

Students are required to take the following courses as a cohort: MCOM 605, MNGT 601, MKTG 603 and MCOM 685. Members of the cohort make a commitment to complete this set of courses within one year. Each cohort is designed to help students work together as a network of professional colleagues in class, on campus and online. Students who earn a B or better in each of these courses will receive a Graduate Certificate in Strategic Public Relations and Integrated Communications.

### Admission Requirements

- A bachelor's degree with at least 24 credits of related course work in one or a combination of the following fields: mass communication, public relations, advertising, marketing, and management; at least one advanced writing course; one statistics course; or equivalent professional experiences that are documented by the student and approved by the program director.
- A minimum overall undergraduate GPA of 2.75 for conditional admission or a GPA of 3.00 or higher for full admission. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.
- The following materials should be sent directly to the program director:
  - One letter of recommendation. Use the Recommendation Form in the Graduate School Application Packet.
  - A resume.
  - A cover letter expressing intent and/or interest.

The application deadline for fall admission for those students wishing to enroll in a cohort is March 1. Indicate in your letter of intent whether or not you want to join the fall cohort. Application deadline for spring admission

(no cohort) is October 1. Applications will continue to be processed after the deadline until available spaces are filled.

### Degree Requirements

- Completion of required prerequisite courses.
- Completion of a total 36 credits of course work: 18 credits of required courses and 18 credits of electives. A minimum of 27 credits (including graduate project or thesis) must be earned at the 600-800 levels.
- To receive a Master of Science in Communications Management, students must earn a B or better in 18 hours of core requirements and 18 hours of the following approved electives.

### Core Requirements (18 credits)

MCOM 605	Theory and Practice of Public Relations and Organizational Communication (3)
MNGT 601	Administrative Theory and Practice (3)
MKTG 603	Marketing Administration (3)
MCOM 685	Managing Strategic Public Relations and Integrated Communications Campaigns (3)

Six hours of a directed research project or thesis supervised by a member of the faculty in Mass Communication and Communication Studies, or Management and Marketing:

MCOM 897	Graduate Project in Mass Communication
	or
MCOM 898	Thesis

### Electives (18 credits)

*At least one writing/information technology course from the following:*

MCOM 507	Writing for the New Media
MCOM 601	Media Writing
ISTC 541	Computer Technology and Utilization
ISTC 605	Web-based Instruction in Education



ISTC 633	Instructional Video
ISTC 635	Theory and Design of Computer-based Instruction
WRIT 617	Editing
WRIT 619	Communication in the Nonprofit Sectors
WRIT 621	Business Writing
WRIT 623	Technical and Scientific Writing
WRIT 625	Design, Layout and Production
WRIT 675	Corporate Script Writing
WRIT 729	Corporate Communications Consulting
WRIT 733	Communication Management
COMM 695	Independent Study in Communication Studies
MCOM 795	Independent Study in Mass Communication

*At least one course dealing with ethics from the following:*

MCOM 533	Media Ethics
PHIL 563	Business Ethics
MNGT 609	Business and Society
MCOM 635	Journalism Ethics
COMM 695	Independent Study in Communication Studies
MCOM 795	Independent Study in Mass Communication

*At least one research course from the following:*

MCOM 631	Research Methods in Mass Communication
MKTG 607	Marketing Research
PSYC 585	Experimental Design
ISTC 685	Research in Instructional Technology
WMST 609	Applied Research Methods I
SOCI 582	Research Methods
COMM 695	Independent Study in Communication Studies
MCOM 795	Independent Study in Mass Communication

*At least one course dealing with strategic management from the following:*

COMM 519	Organizational Communication
MCOM 559	Professional Issues in Public Relations

MCOM 682	Issues Management
MKTG 605	Strategic Marketing Management
PSYC 641	Change in the Workplace
WMST 601	Women and Gender in the Workplace
WMST 602	Women and Communication
WMST 611	Women, Public Policy and Social Change
COMM 695	Independent Study in Communication Studies
MCOM 795	Independent Study in Mass Communication

*At least one course dealing with people management from the following:*

COMM 518	Communication Training and Development
COMM 522	Conference and Meeting Management
COMM 601	Theories and Research in Intercultural Communication
COMM 602	Public Advocacy and Conflict Management
MNGT 602	Conflict Management in Commerce and Industry
MNGT 603	Human Resource Manage- ment in a Global Economy
MNGT 604	Labor Relations
PSYC 642	Organizational Behavior
PSYC 644	Team Building
COMM 695	Independent Study in Communication Studies
MCOM 795	Independent Study in Mass Communication

*One additional elective course (3 credits) from the above electives or from the following:*

MCOM 547	Ad Campaigns
MCOM 551	Public Relations for Non-profit Organization
MCOM 572	International Advertising
MCOM 617	International Communication Campaigns
MCOM 633	Theories of Mass Communication
MCOM 783	Internship in Public Relations

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MKTG 609	Advertising Management
MKTG 604	Global Marketing
MKTG 602	Consumer Behavior
MNGT 695	Independent Study in Management
COMM 695	Independent Study in Communication Studies
MCOM 795	Independent Study in Mass Communication

NOTE: 1) Up to 6 hours of approved graduate courses may be transferred from other approved universities. 2) No more than 9 credit hours can be taken of 500-level courses. 3) Students who have passed an accreditation examination administered by a professional organization, such as the Public Relations Society of America or the International Association of Business Communicators, may be eligible to earn up to 3 academic credits for independent study, based on the presentation of a professional portfolio and approval by the program coordinator.

### CERTIFICATE IN STRATEGIC PUBLIC RELATIONS AND INTEGRATED COMMUNICATIONS

#### Required Courses (12 credits)

MCOM 605	Theory and Practice of Public Relations and Organizational Communication
MNGT 601	Administrative Theory and Practice
MKTG 603	Marketing Administration
MCOM 685	Managing Strategic Public Relations and Integrated Communications Campaigns

Students must earn a grade of B or better on the required courses to receive a certificate in Strategic Public Relations and Integrated Communications.

### MUSIC EDUCATION

Degree: Master of Science  
Program Director: Michael Jothén  
410-704-2257  
mjothen@towson.edu

The Master of Science in Music Education provides a flexible curriculum that allows stu-

dents to earn up to 15 elective credits in a field of specialization. In consultation with the graduate adviser, students may select a group of courses in which they are interested, such as music education, applied music, music theory, music history, music composition or other graduate areas of professional interest. Students may elect to work concurrently on the graduate Certificate in Music.

Graduates of this program are usually employed as music teachers in public or private schools in the areas of vocal-general and/or instrumental music. Others are employed as private teachers or administrators, or as church musicians.

#### Admission Requirements

- A bachelor's degree in music education or music or certification as a public school music teacher.
- A minimum grade point average of 3.00 for full admission, 2.75 for conditional admission, or 2.50 for provisional admission. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.
- Completion of music theory and history advisory examinations.

#### Degree Requirements

**Plan A: Master of Science in Music Education with Thesis** (minimum 34 credits, and maximum of 9 credits at the 500 level)

#### Required Courses (24 credits)

MUED 601	Current Trends in Music Education (3)
MUED 661	Seminar in Instrumental Music (3) or
MUED 662	Seminar in Choral Music (3)
MUED 695	Research Methods in Music Education (3)
MUSA xxx	Performing/Composing Experiences (3) (see Music Applied (MUSA) Private Lessons and Ensembles under Course Descriptions)
MUSC xxx	History/Literature (3)
MUSC xxx	Theory/Composition (3)
MUSC 898	Thesis (6)

### Electives (10 credits)

Selected with approval from any 500- to 800-level courses. A maximum of 9 credits may be at the 500 level.

**Plan B: Master of Science in Music Education with Graduate Project (minimum 34 credits, and maximum of 9 credits at the 500 level)**

### Required Courses (19 credits)

*Identical to Plan A except MUSC 897 Graduate Project replaces MUSC 898 Thesis*

### Also Required

MUSC 897 Graduate Project - Paper (1)  
or  
Graduate Project - Recital (1)  
or  
Graduate Project - Composition (1)  
or  
Graduate Project - Practicum (1)

### Electives (15 credits)

Selected with approval from any 500- to 800-level courses. A maximum of 9 credits may be at the 500 level.

Students are required to successfully complete the comprehensive examination covering course content in music and music education.

### MUSIC PERFORMANCE/COMPOSITION

Degree: Master of Music

Program Director: Luis Engelke

410-704-4644

lengelke@towson.edu

The Master of Music program seeks to develop a high level of musicianship and scholarly skills. It is designed for students who exhibit special talents in performance or composition and have completed sufficient undergraduate courses to meet the requirements for admission. The degree prepares the candidates for careers in teaching, performing and composing.

### Admission Requirements

- A baccalaureate degree in music or music education.
- A supplemental application available from the department or the Graduate School must be filed.
- Acceptable evaluation by two persons familiar with the applicant's scholarly and music performance and aptitude. Evaluations are completed on the Master of Music Degree Recommendation Form obtained from the department or the Graduate School.
- Acceptable performance on an audition in the student's major performance area.
- Acceptable scores on the theory and music history placement test. Students who do not meet minimal requirements may be required to enroll in prescribed courses.
- A minimum grade point average of 3.00 for full admission, 2.75 for conditional admission, or 2.50 for provisional admission. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.

### Degree Requirements

#### Required Credits (21 credits)

- Private Lessons (12 credits)  
from student's major performance area
- History (3 credits)  
MUSC 685 Bibliography and Research (3)
- Theory (3 credits)  
MUSC 631 Advanced Theory (3)
- Ensembles (suitable for the major performance area) (2 credits)  
Selected, with approval, from Music Applied (MUSA)—Ensembles (1) listed under the Course Descriptions section of this catalog.
- Recital (1 credit)  
MUSC 797 Graduate Recital (1)

### Electives (10 credits)

Selected with approval from any 500- to 800-level music courses. A maximum of 4 of the elective credits may be taken in lessons and/or ensembles.

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Students must satisfactorily complete the comprehensive examination.

### **CERTIFICATE IN MUSIC**

Program Director: Michael Jothen  
410-704-2257  
mjothen@towson.edu

The graduate Certificate in Music provides comprehensive training for a music education specialist in an area of professional interest and/or need. In consultation with the program director in music education and an appropriate faculty adviser, a sequence of courses and experiences totaling 15 to 21 credits is identified which help music educators to understand the rationale and curricula associated with their chosen interest. A sequence of instruction provides core experiences, supporting experiences, elective opportunities, and a culminating experience appropriate to the area of interest. The program is designed to assist music educators in securing focused, advanced study in a personal area of choice. The certificate may be earned separately from, or in conjunction with, the Master of Science degree in Music Education.

Examples of core areas of study within the graduate Certificate in Music include the Application of Dalcroze, Orff and Kodaly, Community Music, Music Therapy, Conducting (instrumental and vocal), Studio Pedagogy and Music Industry.

### **Admission Requirement**

Students must have a baccalaureate degree with a major in music education or be certified as a public school music teacher.

### **Certificate Requirements: General**

Students must complete 15 to 21 credits of course work with a culminating application experience in their core area of interest.

### **Certificate Requirements: DOK**

*Completion of 15 credits*

MUED 617 Choral Workshop in  
Elementary and Secondary  
School Music (2)

MUED 630 Dalcroze, Orff and Kodaly:  
Principles and Techniques for  
the Music Classroom I (2)  
MUED 631 Dalcroze, Orff and Kodaly:  
Principles and Techniques for  
the Music Classroom II (2)  
MUED 632 Dalcroze Practices (2)  
MUED 633 Orff Techniques (2)  
MUED 634 Kodaly Techniques (2)  
MUED 635 Dalcroze, Orff, Kodaly  
Pedagogy and Curriculum  
Development (3)

### **THEATRE**

Degree: Master of Fine Arts  
Program Directors: Juanita Rockwell and  
Ralph Blasting  
410-704-3851  
jrockwell@towson.edu  
rblasting@towson.edu

The Towson University Master of Fine Arts in Theatre is dedicated to creating a fluid, alternative environment for the training of the total theatre maker. The program is designed as a self-directed process that will challenge, expand and develop each participant's artistic vision. This vision is explored in terms of its structural, aesthetic and cultural context, as well as its skillful application of craft.

Intercultural, interdisciplinary and collaborative, Towson's M.F.A. in theatre is for artists who cannot be content working in a single discipline or in the traditional conservatory model. They want to construct the soundscape that interacts with the spoken text they've written. They want to build the puppets as well as train the performers they're directing. They want to perform the text themselves, illuminated by their own lighting design. They want to create the installation in which they will perform.

Students accepted into this program have already begun to articulate a creative vision, but have decided to return to graduate school to both expand and refine that vision. We seek artists who would feel restricted by a conservatory style program. Whether directing, designing, performing, producing, constructing



or writing, the student/artist must be willing to work both independently and collaboratively. The program is based on the cross-fertilization of ideas among participants and the thoughtful implementation of human, material, economic and environmental resources. The program requires that its participants create their own opportunities, work in a variety of disciplines, and serve as self-producing artists.

Seminars and workshops with distinguished visiting artists play a major role in the foundation of the curriculum. Guest artists expose the student artist to a wide range of theatrical styles and methods, emphasizing their cultural contexts and underlying principles. Guests may facilitate a master class for one or more days, lecture or demonstrate as part of a required class, or work in extended residency with the students of the program.

Some of our guest artists and companies include Richard Armstrong (England), Philip Arnoult (Maryland), George Bartenieff (New York), Augusto Boal (Brazil), Kia Corthron (New York), Donna DiNovelli (New York), Sabrina Hamilton (Massachusetts), Heinz Uwe Haus (Germany), Independent Eye (California), Jean-Claude van Itallie (Massachusetts), Gabriella Lev (Israel), Daniel Macivor (Canada), Akira Matsui (Japan), Michael Rohd (Oregon), San Francisco Mime Troupe (California), Shozo Sato (California), Teatro Abya Yala (Costa Rica), Theodora Skipitares (New York), Squonk Opera (Pennsylvania), Daniel Stein (California), Touchstone Theatre (Pennsylvania), Fritz Vogel (Netherlands), Mac Wellman (New York), and Putu Wijaya (Indonesia).

While individuals will most likely have different experiences during their times in the program, there is a basic structure we suggest. Of the 60 credits required for graduation, 43 credits consist of the program's core courses. We encourage students to emphasize the core curriculum during the first two years, so as to leave the third year open to emphasize their final projects. During the first year of the program, student-artists are encouraged to explore their own artistic visions and the aesthetic of those around them—fellow students, guest artists, people focusing on other disciplines—

both within the university and beyond. In the second year, student-artists continue to seek out opportunities to collaborate on projects with others while developing their own projects. Finally, in the third year, the student-artist seeks out collaborators to work on projects under their own development.

All graduate students approach projects from an interdisciplinary perspective, and each student works in a variety of disciplines. New work may be created in a variety of forms, such as interdisciplinary constructions or installations, ensemble creation, performance art, movement theatre, or productions of new scripts. Transformations of existing literature may involve reconstructing classic text or design elements, historical reinterpretation, or the integration of intercultural aesthetics. In directing and design, special attention is given to the collaborative creation of style. In text construction, special attention is given to innovative language and structure. In dramaturgy, special attention is given to aesthetic and cultural context. In technical production, special attention is given to safely integrating new technology, practices and materials. In performance, special attention is given to the integration of voice and movement as an expression of style. The student-artist is urged to combine disciplines within a given project, perhaps working as director/designer, technician/designer, or writer/performer.

### Admission Requirements

Applicants must hold a bachelor's degree from a regionally accredited college or university with a grade point average of 3.00 or higher. A minimum GPA of 2.75 is required for conditional admission and a minimum GPA of 2.50 is required for provisional admission. All matriculated students are accepted conditionally for one year. Before the end of the third semester of study, there will be a review process in which a student is either fully accepted or denied continuance.

Candidates are screened by both the M.F.A. program and by the Graduate School. The following should be submitted to the Graduate School no later than March 1:

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- A Graduate School application with required fee.
- Official transcripts from every college or university attended.

The following are required as part of the department screening process and should be sent directly to the M.F.A. program directors, no later than March 1:

- Three letters of recommendation from individuals who can speak to the applicant's talent, scholarship, collaborative skills and ability to thrive in a self-directed program.
- A list of at least three other references, with telephone numbers, whom the department may contact for additional evaluations.
- A personal artistic statement outlining the candidate's goals as a theatre artist and the specific relevance of the M.F.A. program at Towson to the candidate's objectives.
- A current professional resume.
- Slides, photographs, video, reviews, papers or other supporting materials in multiple artistic disciplines.

An interview with an audition and/or preliminary portfolio review will be granted at the discretion of M.F.A. faculty following initial admission screening.

### Degree Requirements

The Master of Fine Arts in Theatre requires 60 credits.

### Required Courses (42-43 credits)

THEA 601	Dramaturgy: Interdisciplinary (3)
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THEA 602	Dramaturgy: Intercultural (3)
THEA 607	Self-Empowerment in Theatre (3)
THEA 608	Theatre Design Techniques (3)
THEA 609	Text Construction (3)
THEA 610	Theatre Systems (3)
THEA 675	Research Methods (3)
THEA 720	Graduate Directing (3)
THEA 740	Graduate Project Laboratory (2)
THEA 750	Graduate Project Rehearsal and Performance (2)
THEA 760	Integrated Seminar (3) (must be repeated at least once)
THEA 897	Final Project (6)
<i>One of the following:</i>	
THEA 603	Performance: Solo (3)
THEA 605	Performance: Ensemble (3)
THEA 606	Voice/Movement Integration (3)

### Electives (17 credits)

These courses are chosen in collaboration with a department adviser.

Portfolio review is required before registering for the final project.

Towson University reserves the right to change degree requirements for the M.F.A. Information on changes will be available from the graduate program directors.



## THE COLLEGE OF HEALTH PROFESSIONS

Each of the programs in the College of Health Professions provides students with a rigorous grounding in the liberal arts and sciences, which is essential as a foundation for specialized study. Students are prepared to assume roles in a variety of clinical, teaching and community settings.

Society places great value on health. The college accepts as its philosophical foundation the belief in the worth and dignity of individuals and their right to fulfill their potential in life. Preservation or restoration of the individual's dignity through health then becomes the basic tenet of the programs of the college. The programs promote the attainment of the highest level of wellness possible in the patients and clients who are served. Graduates of the college are committed to service to the public in maintaining wellness and to those whose well-being is threatened or altered by illness, injury or natural processes.

The graduate programs in the college are accredited by appropriate professional and educational accrediting agencies, thus enabling the successful graduate to sit for her or his professional licensure or certification exam where those credentialing mechanisms exist. A number of courses in some of the programs are available to students enrolled in other graduate programs.

Charlotte E. Exner, Dean

J. Ellen Eason, Associate Dean

### COLLEGE OFFICE

Towson Center, Room 337

410-704-2132

Fax: 410-704-3479

### Doctoral Degree Programs

Audiology

Occupational Science

### Master's Degree Programs

Applied Gerontology (*See Interdisciplinary Programs section*)

Health Science Administration

Community Health Education

School Health Education

Nursing

Occupational Therapy (professional preparation and post-professional programs)

Physician Assistant Studies

Speech-Language Pathology

### Certificate Programs

Clinician-Administrator Transition (CAT)

Nursing Education





## **PROFILE OF A COMMUNICATION SCIENCES AND DISORDERS GRADUATE**

### **Post-baccalaureate Programs**

The Department of Communication Sciences and Disorders educates students for clinical positions in speech and language pathology and audiology in a variety of settings including educational systems, acute care, subacute and rehabilitation hospitals, skilled nursing facilities and private practice. The graduate curriculum is consistent with standards set by the Council on Academic Accreditation of the American Speech-Language-Hearing Association. Each CSD graduate is expected to perform successfully in the following eight areas:

#### **Communication**

- Demonstrate effective listening skills and communicate effectively with the patient/client, family members, health professionals and educators.
- Write articulate, accurate clinical reports and scientific papers using appropriate format (e.g. APA), writing style and content.
- Present training seminars using current information technology.
- Write proposals for research studies.
- Present treatment efficacy data for case studies.

#### **Thinking—Critical, Creative, Reflective**

- Use problem-solving techniques.
- Use critical, creative and flexible thinking to derive integrated and documented conclusions.
- Analyze and synthesize information.

#### **Professional Development**

- Apply theory and content in one's major.
- Value the relevance of all disciplines in the educational, psychological/social and clinical settings.
- Formulate, investigate and report results of clinical questions.
- Read, integrate and apply research.
- Participate in professional organizations and their meetings.
- Develop career goals and plan for continuing education.
- Develop a professional resume.
- Advocate for the profession.
- Promote literacy skills across the age span.

#### **Clinical Skills**

- Plan, implement and interpret assessment protocols for specific communication disorders and differences based on scientific rationale.
- Plan, implement and interpret treatment goals, objectives and plans.
- Maintain clinical records in an organized and confidential manner.
- Analyze and modify client's communication and related behaviors.
- Develop behavioral observation skills.

**Interpersonal Skills**

- Accept responsibility for one's own actions.
- Display a positive, nonjudgmental attitude.
- Demonstrate effective team skills.
- Display professional behavior and appearance.
- Use self-evaluation for individual development of clinical skills and for professional growth.
- Use good organization and time-management skills.
- Show flexibility in interaction styles depending on communication partner and/or work setting.

**Technology**

- Use current technology for clinical assessment, treatment and writing.
- Use current assistive technology methods in clinical practice.
- Use information retrieval systems to seek answers to clinical questions.
- Use Internet communication systems.

**Diversity – International and Demographic**

- Demonstrate knowledge of concepts in multiculturalism related to SLP and Au.D. in academic and clinical settings.
- Understand phonological, morphological, syntactic, pragmatic and narrative rules among different cultures.
- Interact in a professional manner in clinical and educational settings with all people regardless of race, color, religion, age, national origin, sex and handicap.

**Ethics—Professional Practice**

- Use ethical behavior in dealing with clients, their families, and other professionals.
- Deliver clinical services within the professional scope of practice.

**AUDIOLOGY**

Degree: Applied Doctorate in Audiology  
(Au.D.)

Program Director: Diana Emanuel  
410-704-2417  
demanuel@towson.edu

The Au.D. curriculum consists of 93 credits including the following requirements: 33 credits of clinical practicum, which includes a one-year clinical residency, and 60 credits of course work. Course work includes 3 credits of electives selected from approved courses.

The program of study is intended to train clinicians who will demonstrate competency:

- in oral, written and other forms of communication
- in scientific and research foundations of practice

- in prevention and identification of communication disorders
- in evaluation and treatment of disorders of auditory, balance, communication and related systems
- by passing the examination required for national certification in audiology

**Admission Requirements**

- Bachelor's degree with a minimum GPA of 3.00, GRE scores and three letters of recommendation. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.
- Successful completion of the following courses:  
BIOL 110 Introduction to Biology (4)  
PSYC 101 Introduction to Psychology (3)

PSYC 212	Behavioral Statistics (4)	ACSD 843	Vestibular Rehabilitation and Tinnitus Management (2)
PSYC 205	Introduction to the Helping Relationship (Counseling) (3)	ACSD 853	Cochlear Implants (3)
SPPA 105	Speech and Language Development (3)	ACSD 855	Hearing Aids III: Seminar in Advanced Amplification (3)
SPPA 200	Anatomy and Physiology of the Auditory and Vocal Mechanisms (3)	ACSD 998	Audiology Residency (18) (48 weeks)
SPPA 210	Phonetics (3)	IDHP 647	Health Care Financial Management (3)
SPPA 302	Phonology (3)	IDHP 741	Legal and Ethical Issues in Clinical Practice (3)
SPPA 303	Hearing Science (3)	OCTH 604	Academic and Clinical Education (3)
SPPA 304	Language (3)	PSYC 605	Counseling Techniques (3)
SPPA 313	Speech Science (3)	SPPA 690	Audiology Practicum—on Campus I (3)
SPPA 321	Introduction to Audiology (3)	SPPA 713	Seminar: Research Design in SPPA (3)

## Degree Requirements

All course work and clinic practicum clock hour requirements of the Department of Communication Sciences and Disorders must be completed, and students must demonstrate mastery in four areas of audiology: foundations of practice; prevention and identification; evaluation and treatment as specified by the American Speech-Language-Hearing Association (ASHA) before the Au.D. degree is awarded.

## Required Courses

ACSD 601	Audiology Observation (1)
ACSD 603	Neuroanatomy and Physiology of the Auditory and Vestibular Systems (3)
ACSD 611	Acoustics (2)
ACSD 621	Auditory Diagnostics (3)
ACSD 645	Adult Aural Rehabilitation and Gerontology (3)
ACSD 655	Hearing Aids I: Selection, Verification and Validation of Amplification (3)
ACSD 721	Auditory Diagnostics II (3)
ACSD 731	Calibration and Instrumentation (3)
ACSD 743	Electrophysiologic Evaluation of the Auditory and Vestibular Systems (4)
ACSD 751	Hearing Conservation (2)
ACSD 753	Pediatric Audiology and Rehabilitation (4)
ACSD 755	Hearing Aids II: Hearing Aid Modification Lab (3)

## Electives

*must take one course*

IDHP 600	Health Care Professional in a Changing Environment (3)
IDHP 605	Managing Health Care Professionals (3)
IDHP 651	Planning and Marketing Health in Business and Industry (3)
PSYC 661	Foundations of Rehabilitation Counseling (3)
PSYC 667	Psychosocial Aspects of Disability (3)

## SPEECH-LANGUAGE PATHOLOGY

Degree: Master of Science  
 Program Director: Julie E. Ries  
 410-704-3105  
[jries@towson.edu](mailto:jries@towson.edu)

The Speech-Language Pathology program is accredited by the Council on Academic Accreditation (CAA) of the American Speech-

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Language-Hearing Association and the Maryland State Department of Education. The program provides the student with 1) study of normal communication processes; 2) an in-depth investigation of communication disorders; 3) development of therapeutic goals, procedures and materials; and 4) extensive clinical experience in on- and off-campus settings. The program is designed to enable preprofessionals in the field, i.e., those with a bachelor's degree or the equivalent in speech-language pathology and audiology, to meet the academic and clinical practicum requirements of national and state accrediting, certifying and licensing bodies.

The degree will prepare the individual for national/state certification and state licensure for employment in public school, clinical or hospital settings, or private practice and to pursue advanced degrees. All clinical practicum clock-hour requirements of the American Speech-Language-Hearing Association (ASHA) and the Department of Communication Sciences and Disorders must be completed before the M.S. degree is awarded.

Academic courses are offered in the late afternoons and evenings and clinical practica are provided during the day in the fall and spring semesters. There are some opportunities for clinical practicum experiences and academic course work during the summer sessions.

The Department of Communication Sciences and Disorders faculty recognizes a special responsibility to the profession to ensure that graduates of master's degree programs demonstrate attitudes and behaviors consistent with the standards of the profession.

In keeping with this responsibility, faculty members may recommend to the program director that a student should be disciplined (including dismissal) for exhibiting behavior deemed to be inconsistent with the standards of the profession. Nonprofessional behaviors include dishonesty, unethical conduct, deficient professional/clinical skills, or other behaviors construed by the faculty as counter-productive to the field. Recommendations for disciplinary action will be made by a faculty committee consisting of the program director and the appropriate graduate faculty. The rec-

ommendation for disciplinary action will be reviewed and acted upon by the faculty of the department and forwarded to the dean of the College of Graduate Education and Research. The student has the right to due process.

### Admission Requirements

- Bachelor's degree in speech-language pathology and audiology with a minimum of 33 credits or 42 quarter hours and a minimum GPA of 3.00 in the major. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study. A minimum of 25 documented hours of clinical observation is required.

or

- Students without a bachelor's degree in speech-language pathology and audiology must have completed a minimum of 30 credits of undergraduate course work in speech-language pathology and audiology, including the following courses or their equivalents. A behavioral statistics course is recommended.

SPPA 105	Speech and Language Development (3)
SPPA 200	Anatomy and Physiology of the Auditory and Vocal Mechanism (3)
SPPA 210	Phonetics of American English (3)
SPPA 302	Speech Pathology I: Phonology (3)
SPPA 303	Hearing Science (3)
SPPA 304	Speech Pathology II: Language (3)
SPPA 313	Language and Speech Science (3)
SPPA 321	Introduction to Audiology (3)
SPPA 325	Introduction to Aural Rehabilitation (3)
SPPA 416	Clinical Observations and Techniques (3)

- Acceptable evaluation by three persons familiar with the applicant's scholarly and clinical work and aptitude is required on the speech-language pathology rating form. This form may be obtained by calling or



writing the department. Ratings must be submitted only on these forms, filled out completely and according to the instructions. Rating forms will be accepted only if completed by faculty or employers within the profession.

- The American Speech-Language-Hearing Association's minimum requirements for application for Certificate of Clinical Competence includes a minimum of 12 credits in basic sciences: biology, physical science and math (6 credits) and behavioral/social sciences (6 credits). Three credits in aural rehabilitation and 3 credits in auditory disorders are required in the speech-language specialization.
- A behavioral statistics course, or its equivalent, fulfills the math requirement and is highly recommended. Students without these courses will have to take them as part of their graduate program.
- Students are admitted for the fall semester only. Completed application and admission credentials must meet the deadline of February 1. Admission is extended on a space-available basis with 75 percent of spaces allotted for Maryland residents.

## Degree Requirements

### Required Core (18 credits)

SPPA 690	Clinical Practicum—on Campus (3)
SPPA 705	Professional Issues in SPPA (3)
SPPA 713	Seminar: Research Design in SPPA (3)
SPPA 745	Advanced Clinical Practicum—on-Campus (3)
SPPA 746	Advanced Clinical Practicum—off-Campus (3)
SPPA 747	Advanced Clinical Practicum in Schools (3)
SPPA 798	Advanced Clinical Practicum Continuum—on-Campus (3)

### Speech-Language Pathology Courses (30 credits)

SPPA 602	Foundations of Communication: Developmental Psycholinguistics (3)
SPPA 604	Neurologically Based Language Disorders (3)
SPPA 606	Language Disorders in Children (3)
SPPA 610	Phonology and Articulation (3)
SPPA 614	Fluency Disorders (3)
SPPA 620	Voice Disorders in Children and Adults (3)
SPPA 622	Diagnostic Process in Speech-Language Pathology (3)
SPPA 626	Neurologically Based Speech Disorders (3)
SPPA 628	Dysphagia (2)
SPPA 706	Family-Centered Early Intervention (2)
SPPA 714	Augmentative and Alternative Communication (2)

Successful completion of a Grand Rounds Examination is required. Students may obtain information regarding the Grand Rounds Examination from the program director. Students are encouraged to write a master's thesis. Those who select this option do not take the Grand Rounds Examination. Students must demonstrate acceptable writing skills in all clinical and academic work. Students showing weakness in this area may be advised to take a remedial writing experience in addition to their degree work.

### CLINICIAN-ADMINISTRATOR TRANSITION (CAT) CERTIFICATE

The graduate certificate, Clinician-Administrator Transition program, is designed for health care professionals interested in developing administrative skills. The program combines the practical application of administrative theory to clinical health care settings with

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a user-friendly orientation to multiple technology-based resources. Upon completion of the program, students will possess the knowledge and skills necessary to provide excellence in leadership and day-to-day management in the delivery of health care services.

Individuals enrolled in this 18-credit certificate program may be able to apply credits from this program to master's degree programs in Nursing, Occupational Therapy, or Health Science.

### Admission Requirements

Applicants must meet the general requirements for graduate study outlined in the Towson University *Graduate Catalog*. Additional requirements include:

- Licensure, eligibility for licensure, or certification in a clinical area.
- Bachelor's or master's degree in a clinical field (occupational therapy, physical therapy, respiratory therapy, etc.)
- GPA of at least 3.00 for full admission and 2.75 for conditional admission may be granted. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.

Once all materials are received and evaluated, applicants will be notified regarding acceptance to the program. Students may be admitted at any time during the year. For information regarding the Clinician-Administrator Transition certificate, please contact:

College of Health Professions  
Admissions Coordinator  
410-704-4170  
or Patricia Alt, CAT Program Coordinator  
palt@towson.edu

### Required Courses

- |          |   |
|----------|---|
| IDHP 600 | Transitions: Health Professionals in a Changing Environment (3) |
| IDHP 651 | Strategic Planning and Marketing in Health Care (3)             |
| IDHP 602 | Clinical Program Planning, Implementation and Evaluation (3)    |

- |           |   |
|-----------|---|
| IDHP 647  | Health Care Financial Management (3)            |
| IDHP 605  | Managing Health Care Professionals (3)          |
| *IDHP 610 | Administration of Health Care Organizations (3) |
- \*This class is the capstone for the CAT program, taken after all others.

### HEALTH SCIENCE

Degree: Master of Science  
Program Director: Susan Radius  
410-704-4216  
sradius@towson.edu

The master's program in Health Science is designed to meet needs within the state of Maryland for graduate-trained health professionals to work in educational, medical care, community and work-site settings. The program is intended for people with classroom or work experience in the health sciences or related fields. It is particularly well suited to people who have been in the work force and now wish to receive additional education to enhance their performance as well as their competitiveness on the job.

Students may select from three concentrations: Community Health Education, School Health Education or Administration.

A graduate of the Community Health Education Concentration may pursue a career as a health education specialist in a variety of public and private sector agencies. Students holding current credentials in pharmacy, nursing, dentistry, dietetics and other professions may wish to combine their skills from prior training, and redirect their careers toward community health education related to their specific prior training. A graduate of the School Health Education Concentration can consider such employment opportunities as classroom health teacher, supervisor of a health science program within a school system, health education media specialist, program evaluation specialist, or a position within continuing education and school personnel departments. A graduate of

the Administration Concentration is prepared for positions in a variety of settings (voluntary, proprietary, governmental, school, community, etc.) that require sound backgrounds in health and administration.

The distinctiveness of the master's program in Health Science is its emphasis in pragmatic applications derived from theory. The program is based on the core approach of providing a sound academic base in principles of education and training, research and behavioral sciences. While students register for graduate work within the Department of Health Science, support cores from this or other university departments can be selected to contribute toward their individual professional goals. In addition, with permission of the program director, students may transfer up to 9 graduate credits earned in other academic settings to their master's program of study.

Students may elect to pursue a graduate project or thesis, if either activity is consistent with their professional goals.

The master's program in Health Science is designed to accommodate the needs of students whose personal and professional lives restrict their ability to enroll in a full-time, traditional graduate program. Students are overwhelmingly part-time, participating in courses that are offered only during weekday evenings throughout the year. Individuals desiring full-time graduate status may be able to construct programs responsive to their needs. However, the department cannot promise that full-time course work will be possible within any given semester or academic year.

### Admission Requirements

Admission to the master's program in Health Science requires an undergraduate degree in a health science field (e.g., nursing, health education, psychology, etc.) or substantial upper-division course work in those fields, or experience in those same areas (as determined by the program director). In addition, applicants must maintain a minimum GPA of 3.00 to be admitted to the master's program; conditional admission may be granted to students whose GPA is at least 2.75. All GPA calculations for admission are based upon the last

60 credits of undergraduate and post-baccalaureate study.

### Degree Requirements

The master's program in Health Science requires successful completion of 36 credits. For students in School Health Education, 15 credits are identified for the student by the Department of Health Science, with the remainder derived from elective offerings; in Community Health Education, 18 credits are stipulated by the department; and for those enrolled in the Administration Concentration, 12 credits constitute mandatory enrollment. In addition, all students must complete a three-course requirement (for School and Community Health Education: HLTH 639, 615 and a third course selected with advisement; for Administration: HLTH 633, 615 and a third course selected with advisement) with a GPA of 3.00 in their first attempt at these courses. Students who earn one C among those three courses must register for and receive no less than a B in HLTH 691 to remain in the Health Science master's program; this course will not be included in the 36 credits necessary to complete the program.

### School Health Education

#### Health Science Required Core (15 credits)

HLTH 601	Problems in School Health (3)
HLTH 615	Community Health: Qualitative and Quantitative Elements (3)
HLTH 625	Research Methods in Health (3)
HLTH 639	Education and Training in Health Care (3)
HLTH 785	Graduate Seminar (3)

#### Content Health Core Electives (6 credits) (3 credits if thesis is elected)

HLTH 501	Teaching about Drugs and Sex (3)
HLTH 505	Drugs in Our Culture (3)
HLTH 551	Ecological Aspects of Health (3)

- HLTH 637 Leadership Skills (3)  
 HLTH 643 Health Education:  
 Curriculum Development and  
 Supervision (3)  
 HLTH 649 Program Evaluation (3)  
 or  
 Other approved HLTH electives

**Elective Health Core  
 (3 credits if HLTH 897 is elected)  
 Support Core (9 credits)  
 Final Project/Thesis or 3-credit HLTH  
 elective**

- HLTH 897 Graduate Project in Health  
 Science (3)  
 HLTH 898 Master's Thesis in Health (6)

**Community Health Education**

**Health Science Required Core  
 (18 credits)**

- HLTH 601 Problems in School Health (3)  
 HLTH 615 Community Health: Qualitative  
 and Quantitative Elements (3)  
 HLTH 625 Research Methods in  
 Health (3)  
 HLTH 631 Program Planning in Health  
 Education (3)  
 HLTH 639 Education and Training in  
 Health Care (3)  
 HLTH 785 Graduate Seminar (3)

**Content Health Core Electives-  
 (6 credits) (3 credits if thesis is elected)**

- HLTH 617 Health Administration (3)  
 HLTH 633 Health Care Systems (3)  
 HLTH 637 Leadership Skills (3)  
 HLTH 641 Patient Education (3)  
 HLTH 645 Health Care Policy (3)  
 HLTH 649 Program Evaluation (3)  
 HLTH 651/  
 IDHP 651 Planning and  
 Marketing Health in Business  
 and Industry (3)  
 or  
 other approved HLTH electives

**Support Core (9 credits)  
 Final Project/Thesis or 3-credit HLTH  
 elective**

- HLTH 897 Graduate Project in Health  
 Science (3)  
 HLTH 898 Master's Thesis in Health (6)

**Administration**

**Health Science Required Core  
 (12 credits)**

- HLTH 615 Community Health: Qualitative  
 and Quantitative  
 Elements (3)  
 HLTH 625 Research Methods in  
 Health (3)  
 HLTH 639 Education and Training in  
 Health Care (3)  
 HLTH 785 Graduate Seminar (3)

**Content Support Health Core  
 Electives (21 credits) (18 credits if  
 thesis is elected)**

- HLTH 617 Health Administration (3)  
 HLTH 631 Program Planning in Health Ed-  
 ucation (3)  
 HLTH 633 Health Care Systems (3)  
 HLTH 641 Patient Education (3)  
 HLTH 645 Health Care Policy (3)  
 HLTH 647/  
 IDHP 647 Health Care Financial  
 Management (3)  
 HLTH 649 Program Evaluation (3)  
 HLTH 651/  
 IDHP 651 Planning and Marketing Health  
 in Business and Industry (3)  
 or  
 other approved HLTH electives

**Final Project/Thesis or 3-credit HLTH  
 elective**

- HLTH 897 Graduate Project in Health  
 Science (3)  
 HLTH 898 Master's Thesis in Health (6)

All students must complete a three-course  
 requirement (determined by their concentra-  
 tion) with a grade point average of 3.00 in the



first attempt at these courses. Students who attain a 3.00 in the courses, but who earn a C in one of the courses must register for HLTH 691 Directed Readings, with a health science faculty member in the area in which the C grade was earned. The grade of B or higher in HLTH 691 must be earned. Students who do not earn a 3.00 or higher in the three required courses or who earn less than a B in HLTH 691 are academically dismissed from the program.

## NURSING

Degree: Master of Science

Program Director: Joan C. Jordan

410-704-4209

jjordan@towson.edu

The Master of Science degree program in Nursing is designed to prepare graduates to assume key roles in the delivery of health care to individuals and families within a community-based nursing practice. Options are available in education or administrative roles.

A community-based nurse is a nurse who brings special knowledge of health promotion, prevention and coordination of multiple systems and services to his or her practice in a setting in the community. An individual and family-centered orientation, the development of partnerships with clients, and an appreciation of the values of the community characterize community-based nursing. Community settings are not limited and specialization can focus on specific population groups. This degree is not a specialty in nursing, but a philosophy that guides care in all nursing specialties. It does not prepare a nurse to sit for advanced practice certification, but does include clinical content.

All students are required to complete the Graduate Nursing Core. In addition, each student will select a concentration for further study: Advanced Clinician; Nursing Education; or, Clinician-Administrator Transition (CAT). Students may elect to pursue a graduate project or thesis, if either activity is consistent with their professional goals.

The master's program is designed for the student who has a bachelor's degree with a major in Nursing and is licensed as a Registered Nurse (RN), or eligible, in the state of Maryland. The program also serves the needs of the part-time student. Most courses are offered on weekday evenings; however, other options may be developed according to student interest. Practicum experiences will be planned with appropriate agencies using a time frame congruent with the goals of the experience and preceptor assignments. Once the program is fully implemented, individuals desiring full-time graduate status may be able to construct programs responsive to their needs.

## Admission Requirements

Applicants to the Master of Science program must meet the general requirements for graduate study established by the Department of Nursing and as outlined in the Towson University *Graduate Catalog*. Specifically, they must have:

- A baccalaureate degree with a major in Nursing.
- A minimum GPA of 3.00 for full admission or a minimum GPA of 2.75 for conditional admission.

Applicants whose credentials do not meet the stated criteria for admission and believe their situation warrants special consideration are encouraged to contact the department for information related to its individual review policy.

- A one-page personal statement in which the applicant discusses his or her reasons for seeking admission to the program and how the program will meet the applicant's professional goals.
- A current curriculum vita.
- A photocopy of a current license to practice nursing in at least one state in the U.S. Prior to any clinical practice course, the student must be licensed as a Registered Nurse (RN) in the state of Maryland.
- Satisfactory completion of an elementary statistics and/or nursing research course.
- Completion of an approved physical assessment course.

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### Degree Requirements

The master's program in Nursing requires successful completion of a minimum of 36 credits. Fifteen of these credits will be determined by the concentration the student selects. All students will complete the Graduate Nursing Core.

### Graduate Nursing Core (21-27 credits)

IDHP 600	Transitions: Health Professionals in a Changing Environment (3)
IDHP 741	Ethical and Legal Issues in Clinical Practice (3)
NURS 601	Theoretical Foundations of Nursing Practice (3)
NURS 603	Nursing Research (3)
NURS 605	Nursing in Health Care Systems (3)
NURS 700	Community-based Nursing (3)
NURS 800	Advanced Community-based Nursing Practice (3-6)
NURS 850	Nursing Graduate Project (3) [Optional]
NURS 851	Nursing Master's Thesis (6) [Optional]

### Concentration A: Advanced Clinician (12 credits + 3 additional credits of NURS 800)

Students with special interests or needs can plan a unique master's program with their adviser and approval of the program director. All students are required to take 6 credits of Advanced Community-Based Nursing Practice, and will select four electives from courses available in nursing or in other departments.

### Concentration B: Nursing Education (15 credits)

ADED 585	Adult Education (3)
NURS 610	Curriculum Development in Nursing (3)
NURS 612	Teaching and Learning in Nursing (3)

NURS 710 Evaluation in Nursing Education (3)

NURS 810 Teaching Practicum (3)

### Concentration C: Clinician-Administrator Transition (CAT) (15 credits)

Students desiring to emphasize administration can complete the CAT certificate program, including the following courses (15 credits): Strategic Planning and Marketing in Health Care; Clinical Program Planning, Implementation and Evaluation; Health Care Financial Management; Supervising and Managing Health Care Professionals; and, Capstone Course (practicum). This is an interdisciplinary graduate certificate program offered by the College of Health Professions.

Optional Project or Thesis (3-6)

NOTE: The 800-level courses are capstone courses, thus students in each concentration have a capstone experience.

## CERTIFICATE IN NURSING EDUCATION

The overarching objective of the certificate is that students completing the program develop teaching and evaluation skills through a series of courses designed to facilitate the transition of a clinician to an educator in an academic or health care setting. It is an independent certificate program; however, students in the Certificate in Nursing Education program will study with students selecting the Master of Science in Nursing program, Concentration B: Nursing Education. Upon completion of this 18-credit program, students may wish to pursue additional graduate study and apply these credits to the M.S. degree.

### Admission Requirements

Requirements for the certificate program are the same as those listed above for the M.S. in Nursing program.

## Degree Requirements

### Required Courses (18 credits)

IDHP 600	Health Care Professionals in a Changing Environment (3)
ADED 585	Adult Education (3)
NURS 610	Curriculum Development in Nursing (3)
NURS 612	Teaching and Learning in Nursing (3)
NURS 710	Evaluation in Nursing Education (3)
NURS 810	Teaching Practicum (3)

## OCCUPATIONAL SCIENCE

Degree: Doctor of Occupational Science (Sc.D.)

Program Director: S. Maggie Reitz

410-704-2762

mreitz@towson.edu

The doctorate in Occupational Science prepares certified occupational therapists to teach and engage in applied research. Occupational science is the scientific study of human occupation, the purposeful and meaningful activities that comprise everyday life experiences. The study of occupation involves the investigation of the relationship between humans' occupations and their health. This unique social science examines the capacity of humans to engage in occupation and develop adaptive skills. The main emphasis of this doctoral program is to enhance the health of society by applying knowledge gained through the advanced study of occupational science and human behavior.

The doctoral degree requires the completion of at least 90 credits beyond a bachelor's degree. Students who hold master's degrees in disciplines other than occupational therapy will be allowed to transfer a maximum of 30 credits from their master's degrees; students who hold master's degrees in Occupational Therapy may transfer a maximum of 36 credits from their master's degrees.

## Admission Requirements

- A master's degree from an accredited college or university with an overall GPA of 3.25 in

graduate course work. Students are eligible to request conditional admission with an overall GPA of 3.00.

- A degree or certificate in occupational therapy from a professional occupational therapy program accredited by the Accreditation Council for Occupational Therapy Education or by the World Federation of Occupational Therapists.
- Proof of completion of prerequisite course work.
- Graduate Record Examination (minimum 900 combined math and verbal score) or Miller Analogies Test (minimum 50th percentile).
- Eligibility for licensure to practice occupational therapy in Maryland.
- Three letters of recommendation.
- Letter of intent describing professional goals in seeking the degree and area(s) of interest/specialization.
- Interview by the doctoral admissions committee.
- International students must have TOEFL scores of at least 550.

## OCCUPATIONAL THERAPY

Degree: Master of Science

Program Director: Regena Stevens-Ratchford

410-704-2381

rstevensratchford@towson.edu

The program is designed to prepare graduates to assume key roles in clinical practice, research, education or administration. Occupational therapists' responsibilities in these roles are to assure high quality services for client groups and to advance the practice of occupational therapy.

Incoming students must select one of two options, depending on whether or not they are already certified occupational therapists. In the Master's Degree Program for Certified Occupational Therapists, students may specialize in pediatrics, gerontology or administration/supervision. In the Master's Degree Program for Non-Occupational Therapists, students may specialize in either pediatrics or gerontology. The option for non-occupational therapists is

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offered in both a traditional weekday and in a weekend format. The weekend program admits students every other year.

Towson University also offers a combined B.S./M.S. degree program in Occupational Therapy. For more information about this program, see the *Undergraduate Catalog* or contact the graduate program director.

**NOTE:** Applicants for the master's degree programs for occupational therapists and non-occupational therapists must complete an application for the program in addition to the Graduate School application. Contact the College of Health Professions admissions coordinator at 410-704-4170 for an application packet.

### Master's Degree Program for Certified Occupational Therapists

#### Admission Requirements

- Discuss program of study with graduate program director.
- Possess a bachelor's degree with a minimum 3.00 GPA for full admission, a minimum 2.75 GPA for conditional admission, or a 2.50 GPA for provisional admission. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.
- Complete an accredited entry-level professional training program in occupational therapy.
- Successfully complete the Certification Examination for Occupational Therapists.
- Submit the following items directly to the admissions coordinator:
  - Three reference forms.
  - A graduate occupational therapy admission essay.

#### Admission Criteria

Certified occupational therapist applicants are screened after the Graduate School receives application materials on an applicant-by-applicant basis. These applicants are admitted to the Occupational Therapy graduate program

throughout the academic year. Applicants must follow the procedures outlined below.

- Submit application and transcripts to the Graduate School.
- Meet standards for GPA.
- Meet standards for scores on the three reference forms.
- Meet standards for scores on the admission essay.

### Degree Requirements

The Master's Degree Program for Certified Occupational Therapists consists of a total of 36 credits of required and elective courses, with or without a thesis.

#### Required Graduate Courses

- OCTH 603 Issues in Occupational Therapy (3)  
OCTH 604 Academic and Clinical Education (3)  
OCTH 611 Advanced Theory and Philosophy of Occupation (3)  
PSYC 687 Advanced Experimental Design I (3)  
OCTH 613 Advanced Research Methods in Occupation-Based Practice (3)  
OCTH 781 Graduate Seminar in Occupational Therapy (3)  
OCTH 897 Graduate Project in Occupational Therapy (3)  
or  
OCTH 898 Graduate Thesis (6)

### Specialization Courses (6 credits)

Students may specialize by completing 6 credits in pediatrics, gerontology or administration/supervision.

#### Administration/Supervision

- OCTH 605 Managing Human Resources in Occupational Therapy (3)  
OCTH 606 Managing Occupational Therapy Services (3)

#### Gerontology

- OCTH 621 Geriatric Rehabilitation (3)  
OCTH 631 Community Gerontology (3)



## Pediatrics

- OCTH 623 Evaluation in Pediatric Occupational Therapy (3)  
 OCTH 633 Occupational Therapy Treatment in Pediatrics (3)

## Electives (6-9 credits)

Students who complete the project option will have 9 credits of electives; those students who complete the thesis option will have 6 credits of electives.

## Master's Degree Program for Non-Occupational Therapists

### Program Accreditation

Towson University's Master's Degree Program for Non-Occupational Therapists is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA) located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTA's phone number is 301-652-AOTA. Graduates of the program are able to sit for the national certification examination for the occupational therapist administered by the National Board for Certification of Occupational Therapy. After successful completion of this examination, the individual will be an Occupational Therapist, Registered (OTR). Most states require a license to practice; however, most licenses are based on the results of the NBCOT certification examination. (Persons convicted of felonies may be unable to sit for the Certification Examination and should inquire in advance of program entry regarding eligibility.)

### Admission Requirements

- Possess a bachelor's degree with a minimum GPA of 3.00 for full admission, a minimum GPA of 2.75 for conditional admission, or a 2.50 GPA for provisional admission. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.
- Complete the following eight admission prerequisite courses with a minimum grade of C:

- English Composition
- Introductory Sociology
- Introductory Psychology
- Abnormal Psychology
- Basic Statistics
- Human Anatomy and Physiology I with lab
- Human Anatomy and Physiology II with lab
- Physics (including mechanics and a lab)
- Submit the following items directly to the admissions coordinator:
  - Three Reference Forms.
  - Submit a graduate occupational therapy admission essay.
- Complete and verify at least 30 credits of human service activity. (The department's form must be used.) This work or volunteer experience must have involved direct contact with people with disabilities, and/or illness, and/or other disadvantages. Examples include work/volunteer experience in hospitals, nursing homes, rehabilitation facilities, senior centers, drug rehabilitation programs, programs for the homeless, camps and/or attendant care for a child, an adolescent or an adult. The following experiences do not satisfy this requirement: babysitting with children who do not have disabilities and administrative clerical work. All 30 hours of human service activity must have been completed within two years of the screening deadline. The 30 hours must have been completed in no more than three different settings, and the applicant must have been in each setting for at least 10 hours.

For more information regarding admission prerequisite courses and other aspects of the application process, contact:

CHP Admissions Coordinator  
 Department of Occupational Therapy  
 and Occupational Science  
 Lida Lee Tall, Rm. 305  
 Towson University  
 8000 York Rd.  
 Towson, MD 21252-0001  
 410-704-4170

## Degree Requirements

The Master's Degree Program for Non-Occupational Therapists consists of 59 credits of master's degree prerequisite courses and 39 credits of required and elective graduate courses with or without thesis (a total of 98 credits of course work). The master's degree prerequisites (59 credits) can be completed in five semesters in a traditional full-time format, or in eight semesters of part-time study in the weekend format. All students spend six months in internships (Level II Fieldwork\*) where they apply the theoretical knowledge and skills appropriate to an entry-level qualified professional occupational therapist. Most sites for these three-month internships are in the mid-Atlantic area, but arrangements also can be made in other locations if openings are available.

\*All Level II Fieldwork must be completed within 24 months of completion of academic course preparation.

## Academic Standards for Master's Degree Prerequisite Courses

- Students must maintain a minimum GPA of 3.00 during the semesters in which they are taking master's degree prerequisite courses.
- Students may receive a maximum of four 2.00 grades during their master's degree prerequisite course work.
- Students may repeat a maximum of four courses during their master's degree prerequisite course work.
- Students may repeat the same course only once.
- Students may repeat a maximum of one Level II Fieldwork experience.
- Students must have a GPA of 3.00 in master's degree prerequisite course work to be eligible to enroll in OCTH 435, Occupational Therapy Internship I.
- Students must have a GPA of 3.00 in master's degree prerequisite course work and a grade of S (Satisfactory) in OCTH 435 to be eligible to enroll in graduate course work.

## Master's Degree Prerequisite Courses

BIOL 427	Neuromuscular Mechanisms of the Upper Body (2)
HLTH 207	Health Care in the United States (3)
OCTH 211	Philosophy of Occupational Therapy (3)
OCTH 213	Small Group Dynamics (3)
OCTH 216	Life Span Adaptations (4)
OCTH 217	Analysis of Occupational Performance I (4)
OCTH 218	Analysis of Occupational Performance II (3)
OCTH 221	Clinical Kinesiology (3)
OCTH 313	Physical Dysfunction: Neurological Conditions (3)
OCTH 314	Psychosocial Dysfunction (4)
OCTH 315	Pathological Conditions (3)
OCTH 317	Physical Dysfunction: Musculoskeletal Conditions (2)
OCTH 319	Physical Dysfunction Clinical (2)
OCTH 320	Psychosocial Dysfunction Clinical (2)
OCTH 323	Gerontological Occupational Therapy (2)
OCTH 325	Pediatric Occupational Therapy (4)
OCTH 326	Pediatric Clinical (2)
OCTH 428	Occupational Therapy Organizations in Modern Society (4)
OCTH 435	Occupational Therapy Internship I (6)

## Required Graduate Courses

OCTH 536	OT Internship II (6)
OCTH 603	Issues in Occupational Therapy (3)
OCTH 604	Academic and Clinical Education (3)
OCTH 611	Advanced Theory and Philosophy of Occupation (3)
OCTH 613	Advanced Research Methods in Occupation-based Practice (3)
PSYC 687	Advanced Experimental Design I (3)
OCTH 897	Graduate Project (3)

### Specialization Courses (6 credits)

Students may specialize by taking 6 credits of course work in pediatrics or gerontology.

#### Pediatrics

- OCTH 623 Evaluation in Pediatric Occupational Therapy (3)  
OCTH 633 Occupational Therapy Treatment in Pediatrics (3)

#### Gerontology

- OCTH 621 Geriatric Rehabilitation (3)  
OCTH 631 Community Gerontology (3)

### Electives (3-6 credits)

Students who complete the project option will have 6 credits of electives; those students who complete the thesis option will have 3 credits of electives.

### Combined B.S./M.S. Degree Program in Occupational Therapy

Towson University offers a combined B.S./M.S. degree program in Occupational Therapy. For more information about the program, see the *Undergraduate Catalog* or contact the admissions coordinator, 410-704-4170.

### PHYSICIAN ASSISTANT STUDIES

Degree: Master of Science  
Program Director: Stephen N. Collier  
410-760-4049  
scollier@towson.edu

Towson University offers a Master of Science degree program in Physician Assistant Studies that is completed concurrently with completion of a certificate program at the Community College of Baltimore County—Essex campus. The program begins in June of each year and is 26 months in length. In a time-efficient manner, students complete the requirements to sit for the physician assistant certification examination and earn a Master of Science degree in Physician Assistant Studies. The master's degree program prepares the physician assistant to assume increased roles in clinical practice, health care leadership, advocacy

for clients, education of others, and clinical research, as well as carrying out the other responsibilities of a physician assistant. Such roles are important for physician assistants in a variety of practice, education, and administrative positions.

Students are admitted to both Towson University for the master's program in Physician Assistant Studies and the Community College of Baltimore County—Essex campus for its Physician Assistant professional certificate program. Students will take CCBC—Essex and Towson University courses concurrently throughout the entire program. They must complete all program requirements at both institutions to receive the Master of Science degree and to receive the Certificate in Physician Assistant Studies from CCBC—Essex. Students may not receive either the master's degree or the certificate without completing all requirements for both. Once all requirements for both the M.S. degree and the certificate are complete, students will be able to sit for the national certification examination.

### Admission Requirements

For the master's degree program, applicants must meet the following requirements for admission to the Graduate School at Towson University, which include:

- A bachelor's degree with a grade point average of 3.00 for full admission, OR
- A bachelor's degree with a grade point average of 2.75 for conditional admission, OR
- A master's degree or doctorate from a regionally accredited college or university
- Acceptance to the Physician Assistant program at CCBC—Essex
- Completion of prerequisite courses: Microbiology, Anatomy and Physiology I, Anatomy and Physiology II, Introduction to Organic and Biochemistry, Introduction to Statistical Methods

### Degree Requirements

The master's program in Physician Assistant Studies requires successful completion of a minimum of 36 credits from Towson University and 62 credits from CCBC—Essex. A

maximum of 6 semester hours of C grades is allowed for graduation. A GPA of 3.00 or better overall must be obtained in the graduate courses.

### Required Courses

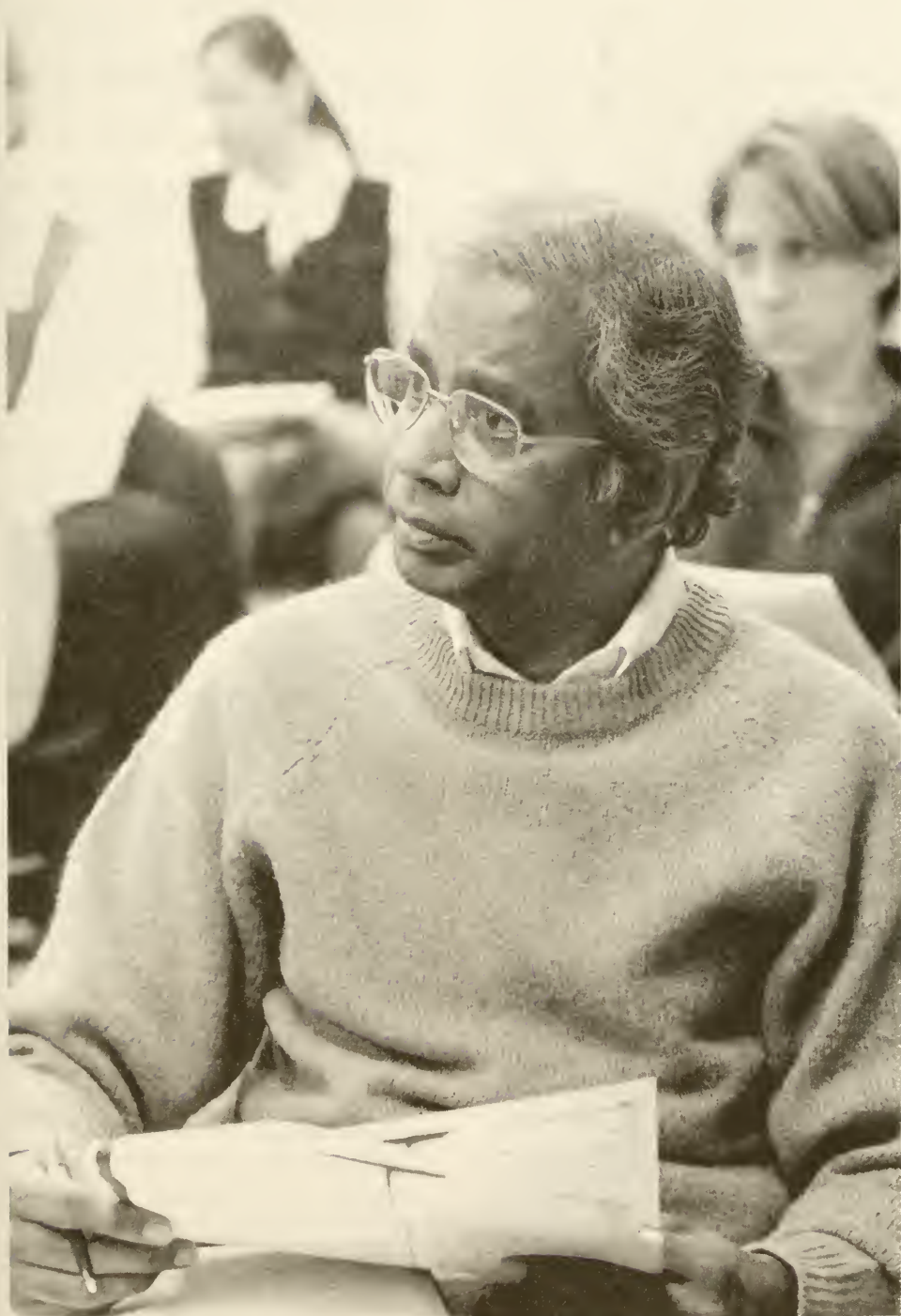
#### CCBC—Essex Courses

PAST 201	Introduction to Medicine (2)
PAST 212	Public Health and Preventative Medicine (2)
PAST 213	Diagnostic Process (4)
PAST 214	Psychosocial Issues I (2)
PAST 216	Psychosocial Issues II (2)
PAST 217	Pathophysiology (3)
PAST 230	Diagnostic Studies I (2)
PAST 231	Diagnostic Studies II (2)
PAST 232	Diagnostic Studies III (2)
PAST 250	Introduction to Clinical Practice (4)
PAST 251	Clinical Practicum I (6)
PAST 252	Clinical Practicum II (12)
PAST 253	Clinical Practicum III (3)
PAST 254	Clinical Practicum IV (11)
PAST 299	Primary Care Preceptorship (5)

#### Towson University Courses

PAST 6xx	Medicine I (2)
PAST 6xx	Ethics, Issues, Trends in PA Practice (3)
PAST 6xx	Pediatrics I (2)
PAST 6xx	Medicine II (6)
PAST 6xx	Pharmacology I (2)
PAST 6xx	Medicine III (2)
PAST 6xx	Pediatrics II (2)
PAST 6xx	Medicine IV (5)
PAST 6xx	Pharmacology II (2)
PAST 6xx	Research Methods in PA Practice I (2)
PAST 6xx	Research Methods in PA Practice II (1)
PAST 6xx	Patient Management Seminar I (1)
PAST 7xx	Patient Management Seminar II (1)
PAST 7xx	Patient Management Seminar III (1)
PAST 7xx	Patient Management Seminar IV (2)
PAST 8xx	Clinical Seminar V (2)





## THE COLLEGE OF LIBERAL ARTS

The liberal arts are the core disciplines of the university, those disciplines that study and interpret what it means to be human, both as individuals and as members of groups. Study of the liberal arts frees us to think more clearly, to analyze and interpret information, to weigh points of view, to arrive at informed judgments about complex issues and to appreciate the rich diversity of human culture.

The College of Liberal Arts provides comprehensive opportunities for undergraduate and graduate instruction. Its curriculum helps students to analyze and interpret information and opinions objectively, make judgments, express themselves clearly and creatively, and move comfortably in the world of ideas and values. Its degree programs emphasize professional career opportunities and interdisciplinary study, as well as more traditional theoretical aspects of the disciplines.

### Teaching

The College of Liberal Arts supports small classes, an emphasis on writing, and personal attention to students. Professors are in the forefront of curriculum innovation in writing instruction, infusion of material on cultural diversity and in the use of technology to expand and enrich learning.

### Scholarship

Commitment to undergraduate education is reflected not only in teaching excellence, but also in the faculty's active involvement in scholarly activity and professional growth, including publications, presentations at professional meetings, and participation in regional, national, and international conferences and workshops. Opportunities exist for students to engage in collaborative research with faculty, further developing students' academic and personal growth while providing new avenues for the College of

Liberal Arts to meet the challenge of continued excellence in education.

### Service

The College of Liberal Arts serves the metropolitan community in many ways, contributing to its cultural life and social progress. The departments, centers and institutes of the college develop creative partnerships with public and private enterprises to ensure that the intellectual resources of the institution serve the people of the Baltimore metropolitan area.

Beverly Leetch, Interim Dean

Carl Behm, Acting Associate Dean

### COLLEGE OFFICE

Linthicum Hall, Room 102A

410-704-2128

Fax: 410-704-6392

[www.towson.edu/cia/](http://www.towson.edu/cia/)

### Master's Degree Programs

Applied Gerontology (*See Interdisciplinary Programs section*)

Geography and Environmental Planning

Humanities

Human Resource Development (*See Interdisciplinary Programs section*)

Liberal and Professional Studies (*See Interdisciplinary Programs section*)

Professional Writing

Psychology

Social Science

Women's Studies (*See Interdisciplinary Programs section*)

### Certificate Programs

School Psychology

Counseling Psychology

Management and Leadership Development (*See Interdisciplinary Programs section*)

Women's Studies

(*See Interdisciplinary Programs section*)

## GEOGRAPHY AND ENVIRONMENTAL PLANNING

Degree: Master of Arts

Program Director: Kent Barnes

410-704-3462

kbarnes@towson.edu

The program prepares graduates for a variety of geographically oriented applied positions in private business and government agencies and for doctoral programs. The program develops a broad knowledge of physical and human geography as well as the ability to analyze and synthesize spatial data and information from a number of fields.

The Master of Arts in Geography and Environmental Planning has two tracks: Track 1: General Geography, and Track 2: Environmental Geography and Planning. Each track has a thesis and non-thesis plan. Students in the Environmental Geography and Planning Track must select at least one-half of their electives from planning or spatial analysis and techniques courses.

### Admission Requirements

- A bachelor's degree with a minimum of 9 credits in geography, with at least a 3.00 average in all geography courses.
- Two letters of recommendation. Use the Recommendation Form found in the Graduate School Application Packet, and send it to the program director.
- A one- to two-page essay discussing career goals and the planned emphasis within the program.
- A minimum undergraduate GPA of 3.00 is required for full admission to the program, 2.75 is required for conditional admission, and 2.50 is required for provisional admission. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.

### Degree Requirements

- Newly admitted graduate students must take diagnostic examinations to demonstrate their knowledge of basic physical

and human geography. Diagnostic examinations are administered in August and January before the beginning of the fall and spring semesters. The examinations are used for advising purposes, and to determine whether students are competent or deficient in their mastery of basic geographical knowledge. Should any deficiencies be noted, a course of study will be prescribed by the graduate studies committee. This course of study must be successfully completed before candidates are approved for graduation.

- Evidence of quantitative competency. Successful completion of GEOG 375/516 Quantitative Methods in Geography, or an approved equivalent, plus at least one other approved course in computer techniques, statistics, or mathematics are assumed to constitute quantitative competency.
- All degree candidates must meet with their academic advisers to file intended programs of study. This should be done prior to, or during, the first semester of course work. The program can be amended in consultation with the adviser.
- Students who have not had GEOG 401 Growth of Geographic Thought, or its equivalent, must take GEOG 551 Growth of Geographic Thought as part of their degree program.
- All graduate students must complete the following core requirements (12 credits):
  - GEOG 601 Seminar on Geographical Perspective (to be taken the first year of graduate study) (3)
  - GEOG 621 Research Techniques (to be taken the first year of graduate study) (3)
  - One 600-level human geography seminar or course on any of the following topics: regional, economic, urban, hazards, human ecology, or other course approved by the program director.
  - One 600-level physical or environmental geography seminar or course on any of the following topics: advanced physical geography, environmental impacts of

## 70 DEGREE AND CERTIFICATE PROGRAMS

land use, water resources, or other course approved by the program director.

- Courses which satisfy the advanced human and physical/environmental requirements do not include planning-oriented and techniques-oriented courses or seminars.
- Graduate students may pursue either a thesis or non-thesis plan of study.

### ***Plan A: Master of Arts with Thesis (minimum 36 credits)***

- Core requirements (12 credits)
- GEOG 898 Thesis (6 credits)
- Planned elective courses (18 credits)

### ***Plan B: Master of Arts without Thesis (minimum 36 credits)***

- Core requirements (12 credits)
- Planned elective courses (24 credits)
- The non-thesis option requires the presentation of a research paper before the graduate faculty or at an approved professional meeting. The paper must be submitted to the graduate committee for approval for presentation. The graduate faculty will judge the quality of both the paper and the presentation, and vote as to whether the student's presentation satisfactorily meets the requirement. If the presentation is judged as unacceptable, the student may re-present the paper at a later date set by the faculty.

## **HUMANITIES**

Degree: Master of Arts

Program Director: H. George Hahn II

410-704-5198

ghahn@towson.edu

The Master of Arts degree program in Humanities will begin to offer courses in the spring of 2002. By providing advanced study in four disciplines of the humanities, the program will benefit both teachers and other post-baccalaureate students seeking intellectual fulfillment or professional advancement.

Unlike the traditional master's degree that specializes in just one area, the Master of Arts program in Humanities bridges four disciplines of the liberal arts: philosophy, literature, history and language. It seeks to establish context and connections, linking significant texts with their intellectual and historical backgrounds from the perspectives of the disciplines of the program. Each course will engage texts in English from four epochs of Western civilization: the Ancient, Medieval, Renaissance and Modern.

Housed in the College of Liberal Arts, the program draws on the faculty of the departments of Philosophy and Religious Studies, English, History and Modern Languages. Its structure has three related parts: (I) Core Texts, (II) Contexts and Connections and (III) Thesis or Seminar Options.

### **Admission Requirements**

- A baccalaureate degree
- Grade point average of 3.00 (last 60 undergraduate credits)
- A statement of intent (500 words)
- Two letters of recommendation

### **Transfer Credits**

With the approval of the program director, students may apply 6 transfer credit hours with the grade of B or better to the elective requirements of the program only.

### **Degree Requirements**

The Master of Arts in Humanities requires completion of a 36-credit program of study: 18 credits of a core curriculum, 12 credits of elective study and 6 credits of thesis or course options.

### **Core Requirements (18 credits)**

Students must complete six 3-credit courses from the following core areas: the Humanities and Philosophical Inquiry (one course); the Humanities and Historical Inquiry (two courses); the Humanities and Comparative Literary Inquiry (two courses); and the Humanities and the Rhetorical Tradition (one course).



## Electives (12 credits)

Students may take courses from approved offerings in at least three of the four participating departments (English, History, Modern Languages and Philosophy and Religious Studies) and, with permission of the program director, from one approved course in theater, music, or art history in the College of Fine Arts and Communication.

## Thesis or Course Options (6 credits)

Students will select one of these options:

- Thesis and defense  
or
- Two approved courses from any one of the home departments

## PROFESSIONAL WRITING

Degree: Master of Science

Program Director: Harvey Lillywhite

410-704-2942

hlillywhite@towson.edu

The program provides advanced study in the theory of writing, writing techniques and style, principles/techniques of editing, and the functions of written communication within the professional/occupational setting. The program centers on 1) developing the communication skills of people seeking to enter or to advance in occupations requiring extensive written analysis and reporting of data and 2) improving written communication and its management in professional organizations.

The program features two concentrations. Writing for the Public and Private Sectors provides experience in writing for a wide range of occupations. Writing in the Professions offers tracks in health professions, teaching writing, journalistic writing, scientific writing or creative writing.

## Admission Requirements

- A 3.00 is required for full admission, 2.75 for conditional admission, and 2.50 for provisional admission. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.

- Two letters of recommendation, preferably letters that speak to writing experience and capability. Use the Recommendation Form found in the Graduate School Application Packet, and send it to the program director.
- Writing sample on a designated topic. Information on the writing sample and topic should be obtained from the Department of English and submitted to the program director.
- Based upon the applicant's undergraduate transcript and upon the writing sample, the department reserves the right to require two specified preparatory undergraduate writing courses, passed with the grade of B or higher in each course, for admission.

NOTE: Upon admission to the program, the student must meet with the assigned adviser to plan a program of study.

## Degree Requirements

### Required Core (18 credits)

- WRIT 611 Rhetoric: The Pursuit of Eloquence (3) ✓
- WRIT 612 Rhetorical Grammar (3) ✓
- WRIT 613 Theory of Exposition (3) ✓
- WRIT 615 History and Development of Prose Style (3) ✓
- WRIT 617 Editing (3) ✓
- WRIT 691 Research Techniques in Professional Writing (3) ✓

## Portfolio

Satisfactory completion of a written master's degree portfolio. The portfolio must be submitted between completion of 12 to 18 credits of degree work, and may be resubmitted once. A second failure results in dismissal from the program.

### Elective Core (18 credits)

In addition to the required core, each student completes an 18-hour elective program from Writing for the Public and Private Sectors or Writing in the Professions. Each concentration has a thesis and non-thesis option.

### Writing for the Public and Private Sectors Concentration

#### Thesis Option

WRIT 898 Thesis (3)

*and 12 credits of electives from the following courses:*

- WRIT 619 Communication in the Profit/Nonprofit Sectors (3)
- WRIT 621 Business Writing (3)
- WRIT 623 Technical and Scientific Writing (3)
- WRIT 625 Design, Layout and Production (3)
- WRIT 627 Modern Rhetoric (3)
- WRIT 641 Theory of Creativity (3)
- WRIT 660 Semiotics for the Professional Writer (3)
- WRIT 670 Topics in Writing (3)
- WRIT 705 Writing Creative Nonfiction (3)
- WRIT 711 Managing the Professional Journal (3)
- WRIT 713 Freelance Writing (3)
- WRIT 729 Corporate Communications Consulting (3)
- WRIT 730 Writing Reviews (3)
- WRIT 731 Science and its Public Audience (3)
- WRIT 733 Communication Management (3)
- WRIT 795 Independent Study in Writing (3)
- WRIT 797 Internship in Professional Writing (3)

#### Non-Thesis Option

Students select 18 credits of electives from the courses listed above.

### Writing in the Professions Concentration

#### Thesis Option

WRIT 898 Thesis (6)

*and 12 credits selected from courses in the specialization.*

#### Non-Thesis Option

Students take 18 credits in the specialization.

### Tracks

#### Writing for the Health Professions (18 credits)

Nine to 18 credits are selected from the courses listed below. If fewer than 18 credits are selected from these courses, the remaining credits are chosen from the list of general elective courses at the end of this section.

- HLTH 617 Health Administration (3)
- HLTH 633 Health Care Systems (3)
- HLTH 651 Planning and Marketing Health in Business and Industry (3)
- ISTC 553 Instructional Photography (3)
- ISTC 633 Instructional Video (3)
- ISTC 655 Media Design and Production (3)
- ISTC 667 Instructional Development (3)

#### Teaching Writing (18 credits)

Nine to 18 credits are selected from the courses listed below. If fewer than 18 credits are selected from these courses, the remaining credits are chosen from the list of general elective courses at the end of this section.

#### Required Courses

(consult with Teaching Writing adviser)

- SCED 603 Teaching Writing Across the Curriculum (3)  
*or*
- SCED 605 Theory, Research and Practice in Teaching Composition (6)  
(by invitation only)  
*or*
- SCED 558 Writing as a Learning Tool in the Secondary School (3)

#### Electives

- EDUC 661 Responding to and Evaluating Writing (3)
- EDUC 667 Writing as Thinking (3)
- EDUC 665 Practicum in Writing Instruction (3)
- EDUC 785 Research in the Teaching of Writing (3)

EDUC 761 Introduction to Research in Education (3)

WRIT 633 Teaching College Composition (3)

### ***Teaching College Writing (18 credits)***

Nine to 18 credits are selected from the courses listed below. If fewer than 18 credits are selected from these courses, the remaining credits are chosen from the list of general elective courses at the end of this section.

### **Required Courses**

WRIT 633 Teaching College Composition (3)

WRIT 797 Internship in College Teaching (3)\*

WRIT 621 Business Writing (3)  
or

WRIT 623 Technical and Scientific Writing (3)

\*Or the equivalent. Students who have experience teaching at the college level or who have other comparable experience may apply to the MPW director for a waiver of this requirement. Students who wish additional experience in the classroom may elect to take a tutoring/observation/teaching practicum before enrolling in Internship in College Teaching. Because work in WRIT 797 includes assignments that must be completed in a classroom setting, students must take WRIT 797 and WRIT 633 concurrently unless they have been granted a waiver or enrolled in the practicum.

### **Electives**

WRIT 627 Modern Rhetoric (3)

WRIT 641 Theory of Creativity (3)

WRIT 660 Semiotics for the Professional Writer (3)

WRIT 6xx Language and Ideology (3)

WRIT 6xx Poetics (3)

WRIT 705 Writing Creative Nonfiction (3)

### ***Journalistic Writing (18 credits)***

Nine to 18 credits are selected from the courses listed below.

MCOM 507 Writing for New Media (3)

MCOM 5xx Literary Journalism (3)

MCOM 601 Media Writing (3)

MCOM 603 Criticism in Mass Media (3)

MCOM 621 Mass Media Law and Regulations (3)

MCOM 635 Journalism Ethics (3)

MCOM 651 Media and Politics (3)

MCOM 670-673 Special Topics in Mass Communication (3)

MCOM 713 Freelance Writing (3)

MCOM 715 Specialized Reporting (3)

MCOM 781 Internship in Journalism (3)

MCOM 795 Independent Study in Mass Communication (3)

MCOM 897 Graduate Project in Mass Communication (3)

If fewer than 18 credits are selected from these courses, the remaining credits are chosen from the following courses:

WRIT 617 Editing (3)

WRIT 625 Design, Layout and Production (3)

WRIT 670-679 Special Topics in Writing (3)

WRIT 691 Research Techniques in Professional Writing (3)

WRIT 705 Writing Creative Nonfiction (3)

WRIT 711 Managing a Professional Journal (3)

WRIT 713 Freelance Writing (3)

WRIT 730 Writing Reviews (3)

WRIT 731 Science and its Public Audience (3)

WRIT 797 Internship in Professional Writing (3)

**Scientific Writing (18 credits)**

- WRIT 623 Technical and Scientific Writing (3)  
*and 6 credits from:*
- WRIT 660 Semiotics for the Professional Writer (3)
- WRIT 670 Topics in Writing (3) (when applicable)
- WRIT 711 Managing the Professional Journal (3)
- WRIT 729 Corporate Communications Consulting (3)
- WRIT 731 Science and its Public Audience (3)
- WRIT 795 Independent Study in Writing (3)
- WRIT 797 Internship in Technical and Scientific Writing (3)

Nine credits from the following departments: biology, chemistry, computer science, mathematics, physics or psychology.

The scientific writing specialization does not offer a thesis option.

**Creative Writing (18 credits)**

Nine to 18 credits are selected from the courses listed below. If fewer than 18 credits are selected from these courses, the remaining credits are chosen from the list of elective courses at the end of this section.

- WRIT 641 Theory of Creativity (3)
- WRIT 647 Writing Poetry (3)
- WRIT 651 Writing Short Fiction (3)
- WRIT 653 Writing the Novel (3)
- WRIT 670 Topics in Writing (3) (when applicable)
- WRIT 705 Writing Creative Nonfiction (3)
- WRIT 795 Independent Study in Writing (3)
- WRIT 898 Thesis (6)

**Electives**

Up to three of the following courses may be elected by students to supplement their work in any special application except scientific writing.

- WRIT 619 Communication in the Profit/Nonprofit Sectors (3)
- WRIT 621 Business Writing (3)

- WRIT 623 Technical and Scientific Writing (3)
- WRIT 625 Design, Layout and Production (3)
- WRIT 627 Modern Rhetoric (3)
- WRIT 660 Semiotics for the Professional Writer (3)
- WRIT 670 Topics in Writing (3)
- WRIT 705 Writing Creative Nonfiction (3)
- WRIT 711 Managing the Professional Journal (3)
- WRIT 713 Freelance Writing (3)
- WRIT 729 Corporate Communications Consulting (3)
- WRIT 730 Writing Reviews (3)
- WRIT 731 Science and its Public Audience (3)
- WRIT 733 Communication Management (3)
- WRIT 795 Independent Study in Writing (3)
- WRIT 797 Internship in Professional Writing (3)

**PSYCHOLOGY**

Degree: Master of Arts

Vice-Chair, Graduate Programs in Psychology:

Susan Bartels

410-704-3070

sbartels@towson.edu

The program offers students the opportunity for in-depth specialization in one of four psychological areas. The tracks are: clinical psychology, counseling psychology, experimental psychology and school psychology. Each is described below in detail with reference to objectives and requirements. All program prerequisite courses are undergraduate courses.

Faculty in the Department of Psychology recognizes a special responsibility to the profession of psychology to ensure that all graduates of the program demonstrate attitudes and behavior consistent with the standards of the profession. The faculty of the specialization involved may recommend to the program director disciplinary action for such behavior as dishonesty, unethical conduct, defi-



cient professional/clinical skills or other behaviors construed by the faculty as counter-productive to the field of psychology. Recommendation for disciplinary action will be made by a faculty committee consisting of the program director and the graduate faculty teaching within that concentration. Before disciplinary action is carried out, the decision for such disciplinary action will be reviewed by the Professional Standards Committee of the Department of Psychology.

## CLINICAL PSYCHOLOGY

Program Director: Barry A. Bass  
410-704-3072  
babass@towson.edu

The Clinical Psychology Track of the Master of Arts in Psychology is designed for students seeking training and experience in the applied professional aspects of clinical psychology. Although a significant number of graduates go on for further graduate study in psychology, the primary focus of the program is the preparation of master's-level psychologists for employment in state and other nonprofit organizations.

Because of the applied professional emphasis, the majority of required clinical courses address the theoretical and practical issues involved in providing direct clinical services. Students take courses in psychotherapy and behavior change, preparing them to practice individual, family, and group intervention techniques. Advanced elective seminars in legal and ethical issues in clinical psychology and cognitive-behavior therapy are offered regularly. Professional courses in psychological testing prepare students to administer and interpret psychometric instruments used to conduct intellectual, neurological, and personality assessments. In keeping with the professional emphasis of the program, all courses are limited to no more than 16 students and are open only to students matriculating in the clinical psychology program.

A unique feature of the track is the requirement for successful completion of a

half-time, 9-month internship during which students provide supervised psychological services to clients in an off-campus mental health setting. During the internship year, students can specialize by working primarily with adults, families or children in either an in-patient or out-patient facility. Among the internship placement sites are: community mental health centers and clinics, state psychiatric hospitals, and other psychological service centers.

Students may choose either the thesis or non-thesis option. A minimum of 39 credits are required for the degree without the thesis or 42 credits with the thesis. Clinical psychology students are encouraged to attend full time so as to complete all program requirements within four semesters. Students may, however, attend part time for some or all of their degree work.

## Admission Requirements

- Courses in the following areas:  
General Psychology (3)  
Abnormal Psychology (3)  
Personality (3)  
Behavioral Statistics (3)  
Tests and Measurements (3)

NOTE: These courses cannot be used to meet part of the formal elective requirements for the degree as defined below.

- Acceptable performance on the General Test of the Graduate Record Examination. Applicants are encouraged, but not required, to take the Psychology Subject Test of the Graduate Record Examination.
- An interview with the program director of the clinical psychology program.
- Two letters of recommendation. Use the Recommendation Form found in the Graduate School Application Packet and send it to the program director.
- A minimum undergraduate grade point average of 3.00 for full admission and 2.75 for conditional admission. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.

- Students are admitted to the Clinical Psychology program for the fall semester only. Those wishing to begin graduate work in the fall must have their completed application and all admission credentials submitted to the Graduate School by February 1. Admission is granted on a competitive, space-available basis.

### Degree Requirements

Students complete required prerequisite courses.

#### ***Plan A: Master of Arts with Thesis (minimum 42 credits)***

#### **Required Courses**

PSYC 620	Assessment of Intelligence (3)
PSYC 631	Advanced Abnormal Psychology (3)
PSYC 651	Techniques of Intervention (3)
PSYC 653	Research Issues in School/Clinical Psychology (3)
PSYC 665	Psychotherapy and Behavior Change I (3)
PSYC 666	Psychotherapy and Behavior Change II (3)
PSYC 697	Practicum in Clinical Psychology (3)
PSYC 765	Personality Assessment in Clinical Psychology (3)
PSYC 766	Advanced Personality Assessment in Clinical Psychology (3)
PSYC 790	Ethical, Legal and Professional Issues in Psychology (3)
PSYC 797	Internship in Clinical Psychology (3)
PSYC 898	Thesis (6)

#### **Electives**

Three credits of courses are elected by the student from within or outside the field of psychology to complement the program of study. Prior written consent of the clinical director must be obtained.

#### ***Plan B: Master of Arts without Thesis (minimum 39 credits)***

- Required courses are identical to those in Plan A except for thesis.
- Electives (6 credits)
- All students must obtain the grade of B or higher in PSYC 697 Practicum in Clinical Psychology and PSYC 797 Internship in Clinical Psychology. Students earning a grade lower than B in either course may repeat that course no more than one time. Failure to earn a B or higher in both courses will result in dismissal from the program.

NOTE: The practicum and internship carry with them a residency requirement of two semesters. The student must be available for placement in a clinical setting.

### **COUNSELING PSYCHOLOGY**

Program Director: Janet Anderson  
410-704-3063  
jandersonparente@towson.edu

The overall focus of the Counseling Psychology Track of the Master of Arts in Psychology is to train individuals to become professionally responsible facilitators for growth and development for persons with mental health problems and problems with living.

This track is intended for persons wishing to counsel patients or clients with concerns in the personal, social, vocational or educational areas.

Students may concentrate in either Community Mental Health Counseling or Rehabilitation Counseling.

A graduate of the Counseling Psychology Track of this program may find employment in a variety of settings, such as community mental health centers, mental hospitals, group homes, rehabilitation centers or substance abuse programs.

The track includes field experiences in the form of practicum and internship courses that will enable the student to accumulate

practical field experience leading to eventual certification or licensure in the state of Maryland.

In addition to practicum and internship courses, students are required to pass both an advancement to candidacy and a comprehensive examination. In lieu of the comprehensive examination, a student may wish to choose the thesis option.

The master's program track in Counseling Psychology may be completed on either a full-time or part-time basis. All courses are offered in the evening at either 4:20 p.m. or 7 p.m. Courses are occasionally offered on Saturday morning. Courses are also offered during the summer session.

### Admission Requirements

- Students must have taken the following prerequisites:  
General Psychology (3)  
Statistics (3)  
Test and Measurements (3)  
Abnormal Psychology (3)
- An undergraduate grade point average of 3.00 is required for full admission, a GPA of 2.75 is required for a conditional admission, and a GPA of 2.50 is required for provisional admission. Conditional and provisional admissions will be accepted if the program has spaces after accepting persons for full admission. Admission is competitive and based on a student's overall cumulative grade point average.
- Two letters of recommendation, which attest the applicant's possession of good interpersonal skills, are also required. Use the Recommendation Form found in the Graduate School Application Packet, and send it to the program director.

Completed applications and admission credentials must meet the deadlines of February 1 for fall semester and October 1 for spring semester. Admission is granted on a competitive, space-available basis.

### Degree Requirements

Students complete required prerequisite courses.

### Required Core

PSYC 605	Counseling Techniques (3)
PSYC 607	Applied Theories of Counseling (3)
PSYC 615	Introduction to Research Methods in Counseling (3)
PSYC 647	Uses of Tests in Counseling (3)
PSYC 721	Group Counseling (3)
PSYC 745	Practicum in Counseling (6)

### Concentration Core (select one)

### Community Mental Health Counseling

PSYC 609	Advanced Counseling Techniques (3)
PSYC 611	Developmental Psychology (3)
PSYC 613	Community Mental Health Counseling (3)
PSYC 631	Advanced Abnormal Psychology (3)
Elective (6)	or
Elective (3) and Thesis (3)	

### Rehabilitation Counseling

PSYC 606	Introduction to Career Development (3)
PSYC 631	Advanced Abnormal Psychology (3)
PSYC 661	Foundations of Rehabilitation Counseling (3)
PSYC 667	Psychosocial Aspects of Disability (3)
PSYC 668	Medical Aspects of Disability (3)
PSYC 793	Internship in Counseling (3)

- Satisfactory completion of the departmental advancement to candidacy examination and the comprehensive Master's examination are required. These examinations are evaluated for content and writing.
- Passing the Departmental Advancement to Degree Candidacy Examination in Coun-

## 78 DEGREE AND CERTIFICATE PROGRAMS

seling Psychology and the consent of the director are prerequisites for the following courses: PSYC 721 and PSYC 745.

- Students should be prepared to take at least two and one-half years to complete the program.
- All degree candidates must meet with their academic adviser to file intended programs of study. This should be done prior to or during the first semester of course work. The program can be amended in consultation with the adviser.

NOTE: Electives selected by students must have prior written consent of the adviser and must be approved for the student's program of study.

### COUNSELING PSYCHOLOGY CERTIFICATE OF ADVANCED STUDY

Program Director: Janet Anderson  
410-704-3063  
jandersonparente@towson.edu

The Certificate of Advanced Study (CAS) in Counseling Psychology is specifically designed for post-master's degree students who wish to take 30 credits beyond the master's degree to meet educational and vocational objectives.

Each student's program will be designed to meet individual needs and goals.

Students who already possess a master's degree from an accredited institution in a human services field may apply to Towson University specifically to enter the CAS program. Students who are in or have completed Towson's master's degree program in Counseling Psychology and who wish to continue their studies toward licensure will be required to take the following courses, which will complete state course work requirements for licensure:

- |          |  |
|----------|--|
| PSYC 606 | Career Development (3)                               |
| PSYC 622 | Advanced Cross-Cultural Psychology (3)               |
| PSYC 637 | Counseling Strategies for Drug and Alcohol Abuse (3) |
| PSYC 718 | Techniques of Family Counseling (3)                  |

- |           |   |
|-----------|---|
| PSYC 745  | Counseling Practicum (3)                                  |
| PSYC 790  | Ethical, Legal, and Professional Issues in Psychology (3) |
| PSYC 793  | Internship in Counseling (3-9)                            |
| Electives | (3-9)   |

### Admission Requirements

Applicants for the CAS certificate must have completed a master's degree and must submit two letters of recommendation. Admission will be determined on a competitive basis. Transfer credits will be accepted in accordance with Graduate School policies, and with the approval of the program director.

### EXPERIMENTAL PSYCHOLOGY

Program Co-Directors: Michael Figler and Craig Johnson  
410-704-3217 (Figler)  
410-704-3218 (Johnson)  
mfigler@towson.edu  
cjohnson@towson.edu

The Experimental Psychology Track of the Master of Arts program in Psychology at Towson University is designed to prepare students for conducting research in industrial, government, private consulting, or hospital settings or for enrollment in doctoral programs.

The track is intended either for students who have completed an undergraduate degree in psychology or for those students who have undergraduate degrees in other majors who are interested in pursuing psychological research.

Students may pursue course work in a variety of areas of specialization within psychology. Graduates will be prepared to pursue other advanced degrees in psychology in a variety of specialty areas or compete for such positions as laboratory researcher, experimental designer, or psychometrician.

Students in the track receive extensive training in research design and analysis and have access to a large and diverse faculty. Students receive considerable personal attention; most classes have fewer than 16 students. As a result, students have been very successful in



either gaining admission to doctoral programs or finding employment in the field of research design and analysis.

A thesis is required of all students.

Students may work toward the degree either full- or part-time. Courses are offered only in the late afternoons and evenings.

### Admission Requirements

- Prerequisite courses in the following areas:  
Statistics (3)  
Experimental Psychology (4)  
Learning (3)
- A minimum undergraduate GPA of 2.50 is required for provisional admission to the program, a 2.75 GPA for conditional admission, and 3.00 for full admission. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.
- Two letters of recommendation. Letters commenting on research experience are particularly useful. Use the Recommendation Form found in the Graduate School Application Packet, and send it to the program director.
- Completed application and admission credentials must meet the deadlines of February 1 for fall semester and October 1 for spring semester. Admission is granted on a competitive, space-available basis.

### Degree Requirements

#### Core Program (32 credits)

PSYC 673	Advanced Experimental Psychology I (4)
PSYC 674	Advanced Experimental Psychology II (4)
PSYC 675	Proseminar I (3)
PSYC 676	Proseminar II (3)
PSYC 677	Learning (3)
PSYC 679	Special Topics Seminar (3)
PSYC 687	Advanced Experimental Design I (3)
PSYC 688	Advanced Experimental Design II (3)
	or
PSYC 689	Multivariate Methods (3)
PSYC 898	Thesis (6)

### Electives (7 credits)

The student may take any graduate elective at the 500 to 700 level with permission from the program director.

### SCHOOL PSYCHOLOGY

Degree: Certificate of Advanced Study and Master of Arts

Program Director: Susan M. Bartels

410-704-3070

sbartels@towson.edu

The School Psychology Track of the Master of Arts in Psychology is one of only two programs in Maryland that trains graduate students to become school psychologists. Students are expected to complete the requirements for the Certificate of Advanced Study (CAS), which is the minimal level of training required to be certified by most State Departments of Education as a school psychologist. Students will also be awarded an M.A. degree during the final year of the program, prior to commencing a full-year internship. Graduates of the program are also qualified for a variety of positions within the field of psychology and for entrance into doctoral programs.

This track trains students to provide consultation to teachers, parents and administrators; to provide direct counseling and intervention to children and adolescents; to complete ecological assessments of classroom environments; and to administer and interpret a variety of psychological tests to assess intellectual functioning, academic achievement, adaptive behavior, and social/emotional characteristics of students. Students are trained to complete multidimensional evaluations that address the specific reason for referral and that are directly linked to recommendations for intervention. This track of the program promotes the use of intervention and assessment techniques that are empirically sound and sensitive to the diverse population of students that school psychologists serve. Students learn and comply with the ethical principles of psychologists and with legislation relevant to children in school environments. Our goal is to produce school psy-

chologists who are well-prepared to function independently in a growing and evolving profession. Curriculum requirements of the program have been developed to be consistent with standards set forth by the National Association of School Psychologists (NASP).

This track of the program strives to be sensitive to the needs of working adults who are obtaining advanced degrees, by allowing students to complete the program on a part-time basis and through offering classes during the late afternoon and evening.

### Admission Requirements

- At least 18 undergraduate credits in psychology, which include courses in each of the following areas (all of which must be completed with a grade of C or better):
  - Behavioral Statistics
  - Abnormal Psychology
  - Personality
- A minimum of 3 credits selected from the following: Experimental Psychology, Experimental Design, or Research Design
- A minimum of 3 credits selected from the following: Child Psychology, Adolescent Psychology, Human Development
- A minimum of 3 credits selected from the following: Educational Psychology, Motivation, Learning Theory, Behavior Management

NOTE: These undergraduate prerequisites cannot be used to satisfy any part of the requirements of the degree. They must be completed prior to initiation of course work for the degree.

- A minimum undergraduate GPA of 3.00 is required for admission to the program. Students with GPAs between 2.75 and 2.99 with special circumstances may be admitted conditionally. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.
- Three letters of recommendation. Use the Recommendation Form found in the Graduate School Application Packet, and send it to the program director.

- A letter of intent indicating why the applicant is interested in pursuing graduate study in school psychology. Send directly to the program director.
- Acceptable performance on the General Test of the Graduate Record Exam (GRE). Competency for graduate study can also be evidenced by an earned master's degree in psychology or a clearly related field in lieu of the GRE. The GRE requirement may also be waived for international students who can document at least two years of successful employment at the professional level in school psychology, psychology or a clearly related field.
- Completed application and admission credentials must meet the deadline of February 1 for fall admissions. Applications are not accepted for spring admission.
- The highest-ranking applicants will be required to interview with the faculty of the School Psychology program.

NOTE: For candidates already possessing a master's degree in School Psychology, courses from a previous degree in School Psychology must be required courses in the current CAS program in order to be accepted toward fulfilling requirements for the CAS. Courses that have been taken for the previous M.A. will be reviewed for currency by the program director. Additionally, students must earn a minimum of 30 credits past their M.A. to graduate with the CAS.

### Certificate Requirements

#### Required Courses

PSYC 713	Role of the School Psychologist (3)
PSYC 733	Exceptional Child: Advanced Issues (3)
PSYC 603	Human Learning (3)
PSYC 605	Counseling Techniques (3)
PSYC 620	Assessment of Intelligence (3)
PSYC 761	Social/Emotional Assessment (3)
PSYC 703	Preschool Assessment (3)
PSYC 651	Techniques of Intervention (3)

- PSYC 771 School Psychology Practicum I (3)
- PSYC 790 Ethical, Legal and Professional Issues in Psychology (3)
- PSYC 687 Advanced Experimental Design I (3)
- PSYC 731 School-Based Consultation (3)
- PSYC 773 School Psychology Practicum II (3)
- PSYC 611 Developmental Psychology (3)
- PSYC 524 Social Psychology (3)  
or
- PSYC 622 Advanced Cross-Cultural Psychology (3)
- PSYC 794 Internship (1,200 hours, full-time) (9)

One course in reading, instructional methods, or curriculum theory (3)

One course in the biological bases of behavior (3)

One elective

## Examinations

### • Master's Comprehensive Examination

The written comprehensive exam is required to receive a master's degree and must be completed successfully before a student begins the internship. Students have one opportunity to retake the comprehensive exam if it is not passed the first time it is taken.

### • Portfolio Evaluation

All CAS candidates are required to submit a professional portfolio during the last semester of their internship. Specific contents and standards for portfolios are provided to students by their advisers. In general, the professional portfolio contains samples of interventions conducted with students and teachers, workshops developed for teachers and parents, various diagnostic reports, and an essay on a selected ethical/legal dilemma. Most materials have been developed as part of course requirements throughout the program.

## SOCIAL SCIENCE

Degree: Master of Science

Program Director: Nicole Dombrowski

410-704-2907

The Master of Science degree program in Social Science will begin to offer courses in spring 2002. The program offers the opportunity for professional enhancement especially in content areas of the social sciences. Experienced teachers wishing to return to the university to study the latest advancements in theoretical, methodological and substantive issues in the social sciences will be especially served. The program is also open to all post-baccalaureate students and may be of particular interest to professionals active in government and applied fields attracted to the latest developments in the social sciences.

Students will follow a program of study coordinated by the departments of Economics, Geography, History, Political Science, Psychology, and Sociology, Anthropology and Criminal Justice. The program aims to familiarize students with research, theoretical advances, applications and methodological approaches to current topics important to the field of social sciences and the world. The program exposes students to interdisciplinary approaches to related subjects and also allows them to specialize in a discipline of particular interest.

## Admission Requirements

- A bachelor's degree with grade point average of 3.00 during last 60 undergraduate credits
- Three letters of recommendation
- A two-page statement of intent

## Transfer Credits

Students may apply 6 transfer credit hours with the grade of B or better, to the elective requirements only within the selected disciplinary track. The program coordinator must approve transfer credits. Approval may be conditional upon the submission of previous written work. All transfers are subject to the 7-year statute of limitations.

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### Degree Requirements

- Completion of the 36-credit program of study
- Completion of 18 credits of core requirements. The offerings within the core program of study will include:

SOSC 6xx Interdisciplinary Approaches to Global Problems (3)

*And five of the following courses:*

SOSC 6xx Sociological Insights (3)

SOSC 6xx American Politics in the 21st Century (3)

SOSC 6xx The Economist's Perspective (3)

SOSC 6xx The Geographer's View (3)

SOSC 6xx Developmental Human Learning: A Life Span Approach (3)

SOSC 6xx The Historian's Approach: Comparative Historiography (3)

- Completion of 18 credits beyond the core requirements in one particular disciplinary track.
- Students will choose their departmental disciplinary track.
- Within each disciplinary track students choose between Option A or B.

### Option A: Thesis Track

- 500-700 level courses (Two within track department) (9 credits)
- 600-700 level courses (Any non-track department) (3 credits)
- Thesis (Within track department) (6 credits)

### Option B: Professional Presentation (Non-thesis track)

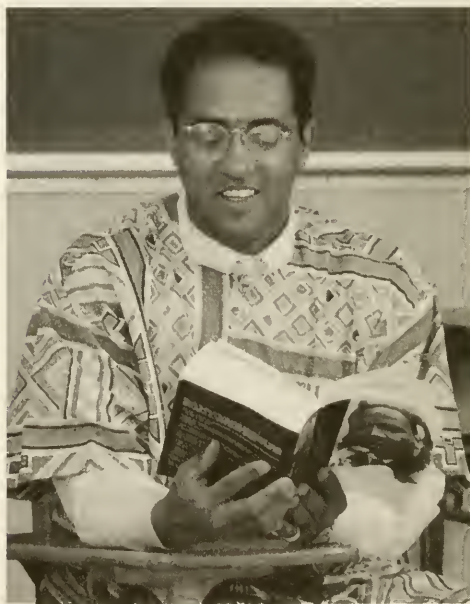
- 500-700 level courses (Within track department) (12 credits)
- 600-700 level courses (Any non-track department) (6 credits)

### Professional Presentation

Students must deliver a peer-reviewed presentation for a university, local or national conference, organized by their track discipline or give a presentation to an assembly of Towson University faculty and program peers.

### Final Portfolio

The program requires that all students (Option A and B) prepare a final portfolio of their work under the direction of their track adviser.







## THE COLLEGE OF SCIENCE AND MATHEMATICS

### Learning by Doing

Welcome to the College of Science and Mathematics at Towson University, a special teaching and learning environment dedicated to excellence in undergraduate and graduate education. We work to develop six key abilities or skills for all of our students:

1. Ability to use scientific and mathematical methods to solve problems
2. Critical thinking ability
3. Creative thinking ability
4. Ability to work collaboratively with others
5. Ability to resolve ethical issues
6. Ability to express ideas and results effectively in written and oral forms

Students work closely with faculty, receiving quality instruction in small classes. We provide an environment for one-on-one interaction between students and faculty in classrooms and laboratories.

### Graduate Education

We offer graduate programs in computer science, applied and industrial mathematics, applied information technology, environmental science, mathematics education and biology. We also offer graduate certificate programs.

### Research and Outreach

Many faculty members in the college are active in pure and applied research. They are widely published and receive external funding in support of their research. Faculty research programs range from nanotechnology, signal processing, and astrophysics to chemistry, molecular biology, biochemistry, ecology, geology and biodiversity, to statistics, applied and pure mathematics, and

computing. Several faculty members work in collaboration with industry and government labs, and their work is supported by grants from major funding agencies. Faculty members are often involved in a range of outreach activities, providing professional development programs for teachers or service to the community that draws on their professional experience.

Come and join us in what we have designed to be a peerless learning environment in a student-centered, comprehensive university. Towson will enrich your life.

Gerald Intemann, Dean  
Katherine Denniston, Associate Dean

COLLEGE OFFICE  
Smith Hall, Room 312  
410-704-2121  
Fax: 410-704-2604  
csm@towson.edu  
www.towson.edu/csm

### Master's Degree Programs

Applied and Industrial Mathematics  
Applied Information Technology  
Biology  
Computer Science  
Environmental Science  
Mathematics Education

### Certificate Programs

Environmental Science  
Information Security and Assurance  
Information Systems Management  
Internet Application Development  
Networking Technologies  
Software Engineering

## APPLIED AND INDUSTRIAL MATHEMATICS

Degree: Master of Science

Program Director: Raouf Boules

410-704-3683

rboules@towson.edu

The Master of Science program provides students with a broad knowledge in applied mathematics, with an emphasis on areas with the highest demand in business and industry. Among the areas stressed in the program are mathematical modeling, numerical computations, operations research, chaotic dynamics, queuing systems and time series analysis. Numerical, computational and algorithmic approaches to problem solving are stressed throughout the program. Graduates of the program will be qualified to work in such fields as operations research, stochastic modeling, and spectral analysis, among many others. Graduates of the program will also be prepared for further work at the doctoral level.

The program also includes a two-semester (6 credit) internship component, a unique feature in the Baltimore area. This internship, which is usually completed in cooperation with one of the mathematics department's established industrial partners, permits students to get vital practical experience working on real problems that are meaningful to business and industry. Another option for fulfilling the internship requirement is to play a leadership role in one of the projects investigated by the department's applied mathematics laboratory. Typically, these projects are sponsored by corporations and government agencies. Students whose careers are in education may, with the approval of the department's Graduate Program Committee, replace the industrial setting of the internship with an educational setting. This will typically entail the development of original course material stressing applied mathematics and using innovative teaching techniques, for example, interactive texts.

The main objectives of the program are: 1) to prepare individuals who are capable of

applying advanced mathematical skills to problems in areas of science, business and industry; 2) to develop the students' abilities to integrate, in a meaningful way, the use of technology in their everyday professional practice; 3) to give educators an opportunity to satisfy their in-service requirements and simultaneously enhance their knowledge of technology and enrich their mathematical backgrounds; 4) to supply students with the mathematical competency necessary for advancement to a more professional role in the high-technology sector; 5) to develop students' reasoning and communication skills for improved service to the high-technology sector; 6) to educate students to solve problems, to work in teams and to communicate in an interdisciplinary setting; 7) to familiarize students with the recent advances in applied mathematics such as fractal geometry, chaotic dynamics, wavelets, spectral analysis, operations research and stochastic modeling; 8) to prepare students for further graduate work at the doctoral level in applied mathematics; and 9) to enrich the academic culture by providing opportunities for interaction of mathematical and industrial research.

Both full-time and part-time students are encouraged to enroll in the program. Core courses are usually offered in the evening, for the convenience of part-time students.

### Admission Requirements

- A baccalaureate degree in mathematics or any other field. The applicant's undergraduate training must have included at least three semesters of calculus, a course in differential equations and a course in linear algebra. Students with any deficiency in their mathematical background may be admitted conditionally if they are willing to correct such deficiency.
- An undergraduate grade point average of 3.00 for full admission, 2.75 for conditional admission, or 2.50 for provisional admission is required. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.



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- For international students whose native language is not English, English competency must be certified by the achievement of a minimum of 500 on the Test of English as a Foreign Language (TOEFL).

### Degree Requirements

The student is required to successfully complete a total of 10 courses (a minimum of 30 credits) as indicated below. A student may transfer up to two graduate-level mathematics courses taken at another institution, provided that the transfer is consistent with the Graduate School policy. Students are required to submit a written technical report and to give an oral presentation based on their internship to the Graduate Program Committee. Satisfactory completion of this summary of the internship experience is one of the requirements for graduation.

### Required Courses

At least six courses from the list A below; must include MATH 791 and MATH 792.

#### LIST A

- |          |   |
|----------|---|
| MATH 632 | Computational Stochastic Modeling (3)               |
| MATH 633 | Queuing Systems (3)                                 |
| MATH 634 | Computational Spectral Analysis and Time Series (3) |
| MATH 635 | Applied Numerical Analysis (3)                      |
| MATH 636 | Linear and Nonlinear Programming (3)                |
| MATH 637 | Advanced Topics in Applied Operations Research (3)  |
| MATH 651 | Mathematics of Fuzzy Logic (3)                      |
| MATH 671 | Chaotic Dynamics and Fractal Geometry (3)           |
| MATH 673 | Applied Industrial Mathematics I (3)                |
| MATH 674 | Applied Industrial Mathematics II (3)               |
| MATH 677 | Advanced Mathematical Modeling (3)                  |
| MATH 791 | Master's Internship I (3)                           |
| MATH 792 | Master's Internship II (3)                          |

### Electives

One or two courses from list B and up to three courses from list C

#### LIST B

- |          |  |
|----------|--|
| COSC 581 | Artificial Intelligence (3)                                  |
| COSC 586 | Computer Graphics (3)  |
| COSC 600 | Advanced File and Data Organization (3)                      |
| COSC 611 | Computer Simulation (3)                                      |
| COSC 661 | Artificial Intelligence Programming and Adaptive Systems (3) |

#### LIST C

- |          |  |
|----------|--|
| MATH 525 | Methods and Materials for Mathematics Laboratory Instruction (1-3) |
| MATH 532 | Mathematical Statistics (3)  |
| MATH 533 | Applied Regression and Correlation Analysis (3)                    |
| MATH 534 | Nonparametric Statistical Methods (3)                              |
| MATH 538 | Life Contingencies I (3)   |
| MATH 539 | Life Contingencies II (3)  |
| MATH 543 | Applied Analysis of Variance (3)                                   |
| MATH 546 | Statistical Methods in Quality Control (3)                         |
| MATH 551 | Graph Theory (3)   |
| MATH 563 | Linear Algebra (3)   |
| MATH 568 | Algebraic Structures (4)   |
| MATH 576 | Introductory Real Analysis (4)                                     |
| MATH 577 | Complex Analysis (3)   |
| MATH 579 | Advanced Calculus (3)  |

### APPLIED INFORMATION TECHNOLOGY

Degree: Master of Science and Certificates in Applied Information Technology

Program Director: Ali Behforooz  
410-704-4909

CAIT@towson.edu

www.towson.edu/CAIT

Applied information technology is the study, design, development, implementation and support of computer-based information systems to address real-world problems. This



program provides graduate level education in IT for students preparing to enter the high-tech work force and those already in the work force who need to update and enhance their skills. We offer courses in areas such as systems development, IT project management, Web page development and IT and business analysis. Graduate certificates in Internet application development, information security and assurance, information systems management, networking technologies, and software engineering are integrated with the M.S. degree program.

### Admission Requirements

- A baccalaureate degree from an accredited college or university is required
- A minimum undergraduate grade point average of 3.00 is needed for full admission, 2.75 for conditional admission, and 2.50 for provisional admission
- Minimum TOEFL score of 550 (where applicable)

These programs are intended for students who have a bachelor's degree in information technology, computer science, computer information systems, or a related field who will enter the program for advanced studies; students who have a bachelor's degree in a field not listed above who are already employed in the IT field and are seeking additional academic studies for professional growth or career advancement; and students who have a bachelor's degree in disciplines other than IT who are seeking preparation for careers in this field.

### Degree Requirements

- Completion of any assigned preparatory courses
- Completion of 33 graduate credits as follows:

### Required Courses (15 credits)

Students must complete the requirements for a Graduate Certificate in Applied Information Technology. Currently, the following Graduate Certificates in Information Technology are available. Additional Graduate

Certificates may be added to this list in the future.

#### Information Security and Assurance

AIT 600	Information Technology Infrastructure (3)
AIT 610	Systems Development Process (3)
AIT 612	Information Systems Vulnerability and Risk Analysis (3)
AIT 614	Network Security (3)
AIT 710	Case Studies in Information Security (3)

#### Information Systems Management

AIT 600	Information Technology Infrastructure (3)
AIT 610	Systems Development Process (3)
AIT 628	IT and Business Strategy (3)
AIT 630	IT Project Management (3)
AIT 730	Case Studies in Information Systems Management (3)

#### Internet Application Development

AIT 600	Information Technology Infrastructure (3)
AIT 610	Systems Development Process (3)
AIT 616	Fundamentals of Web Technologies and Development (3)
AIT 618	Client/Server-Side Programming on the Web (3)
AIT 715	Case Studies in Internet Applications (3)

#### Networking Technologies

AIT 600	Information Technology Infrastructure (3)
AIT 610	Systems Development Process (3)
AIT 620	Business Data Communications (3)
AIT 622	Networking Architectures and Protocols (3)
AIT 720	Case Studies in Networking Applications (3)

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### Software Engineering

AIT 600	Information Technology Infrastructure (3)
AIT 610	Systems Development Process (3)
AIT 624	Software Engineering Fundamentals (3)
AIT 626	Advanced Topics in Software Engineering (3)
AIT 725	Case Studies in Software Engineering (3)

AIT 7xx	Software Project Resource Estimation and Management (3)
AIT 7xx	Software Quality Assurance and Control (3)
AIT 7xx	Advanced Networking Architectures and Protocols (3)
AIT 7xx	Advanced Topic on Distributed Computing (3)
AIT xxx	Database Security and Integrity (3)

### Electives (18 credits)

Students must complete six graduate-level elective courses. A maximum of two elective courses may be in any of the following disciplines: accounting, computer science, human resource development, management, mathematics and technical writing. At least four of the elective courses must be graduate-level AIT courses from the following list:

AIT 612	Information Systems Vulnerability and Risk Analysis (3)
AIT 614	Network Security (3)
AIT 616	Fundamentals of Web Technologies and Development (3)
AIT 618	Client/Server-Side Programming on the Web (3)
AIT 620	Business Data Communications (3)
AIT 622	Networking Architectures and Protocols (3)
AIT 624	Software Engineering Fundamentals (3)
AIT 626	Advanced Topics in Software Engineering (3)
AIT 628	IT and Business Strategy (3)
AIT 630	IT Project Management (3)
AIT 632	Database Management Systems (3)
AIT 732	Advanced Database Management Systems (3)
AIT 7xx	Information Security Tools and Policy (3)
AIT 7xx	Software Engineering Methods and Tools (3)

### CERTIFICATE IN INFORMATION SECURITY AND ASSURANCE

The Graduate Certificate in Information Security and Assurance covers the study, design, development, implementation, and support of computer-based information systems with regard to securing information. This program will provide graduate level education in IT for students preparing to enter the high-tech work force and those already in the work force who wish to update and enhance their skills. This course of study can be completed as a stand-alone graduate certificate or applied to the M.S. degree program in Applied Information Technology. The program is intended for students who have a bachelor's degree in information technology, computer science, computer information systems, or related field who will enter the program for advanced studies. The program may also be of interest to:

- Persons who do not have a bachelor's degree in the field, but who are currently employed in the IT field and are seeking additional academic studies for professional growth or to advance their career.
- Persons who have a bachelor's degree in a discipline other than IT who are seeking preparation for careers in this field.

For additional information, contact the program director, Dr. Ali Behforooz, 410-704-4909, CAIT@towson.edu, www.towson.edu/CAIT.

**Certificate Requirements**

AIT 600	Information Technology Infrastructure (3)
AIT 610	System Development Process (3)
AIT 612	Information Systems Vulnerability and Risk Analysis (3)
AIT 614	Network Security (3)
AIT 710	Case Studies in Information Security (3)

**CERTIFICATE IN INFORMATION SYSTEMS MANAGEMENT**

The Graduate Certificate in Information Systems Management covers the study, design, development, implementation and support of computer-based information systems. This program will provide graduate-level education in IT for students preparing to enter the high-tech workforce and those already in the workforce who wish to update and enhance their skills. The course of study can be completed as a stand-alone graduate certificate or applied to the M.S. degree program in Applied Information Technology. This program is intended for students who have a bachelor's degree in information technology, computer science, computer information systems or a related field who will enter the program for advanced studies. The program may also be of interest to:

- Persons who do not have a bachelor's degree in the field, but who are currently employed in the IT field and are seeking additional academic studies for professional growth or to advance their career.
- Persons who have a bachelor's degree in a discipline other than IT who are seeking preparation for careers in this field.

For additional information, contact the program director, Dr. Ali Behforooz, 410-704-4909, CAIT@towson.edu, www.towson.edu/CAIT.

**Certificate Requirements**

AIT 600	Information Technology Infrastructure (3)
AIT 610	Systems Development Process (3)
AIT 628	IT and Business Strategy (3)
AIT 630	IT Project Management (3)
AIT 730	Case Studies in Information Systems Management (3)

**CERTIFICATE IN INTERNET APPLICATION DEVELOPMENT**

The Graduate Certificate in Internet Application Development covers the study, design, development, implementation and support of computer-based information systems for the World Wide Web. This program will provide graduate-level education in IT for students preparing to enter the high-tech work force and those already in the work force who wish to update and enhance their skills. This course of study can be completed as a stand-alone graduate certificate or applied to the M.S. degree program in Applied Information Technology. The program is intended for students who have a bachelor's degree in information technology, computer science, computer information systems or a related field who will enter the program for advanced studies. The program may also be of interest to:

- Persons who do not have a bachelor's degree in the field, but who are currently employed in the IT field and are seeking additional academic studies for professional growth or to advance their career.
- Persons who have a bachelor's degree in a discipline other than IT who are seeking preparation for careers in this field.

For additional information, contact the program director, Dr. Ali Behforooz, 410-704-4909, CAIT@towson.edu, www.towson.edu/CAIT.

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### Certificate Requirements

AIT 600	Information Technology Infrastructure (3)
AIT 610	Systems Development Process (3)
AIT 616	Fundamentals of Web Technologies and Development (3)
AIT 618	Client/Server-Side Programming on the Web (3)
AIT 715	Case Studies in Internet Applications (3)

### CERTIFICATE IN NETWORKING TECHNOLOGIES

The Graduate Certificate in Networking Technologies covers the study, design, development, implementation and support of computer-based information systems with regard to sharing information over computer-based systems. This program will provide graduate level education in IT for students preparing to enter the high-tech work force and those already in the work force who wish to update and enhance their skills. This course of study can be completed as a stand-alone graduate certificate or applied to the M.S. degree program in Applied Information Technology. The program is intended for students who have a bachelor's degree in information technology, computer science, computer information systems or a related field who will enter the program for advanced studies. The program may also be of interest to:

- Persons who do not have a bachelor's degree in the field, but who are currently employed in the IT field and are seeking additional academic studies for professional growth or to advance their career.
- Persons who have a bachelor's degree in a discipline other than IT who are seeking preparation for careers in this field.

For additional information, contact the program director, Dr. Ali Behforooz, 410-704-4909, CAIT@towson.edu, www.towson.edu/CAIT.

### Certificate Requirements

AIT 600	Information Technology Infrastructure (3)
AIT 610	Systems Development Process (3)
AIT 620	Business Data Communications (3)
AIT 622	Networking Architectures and Protocols (3)
AIT 720	Case Studies in Networking Applications (3)

### CERTIFICATE IN SOFTWARE ENGINEERING

The Graduate Certificate in Software Engineering covers the study, design, development, implementation and support of computer-based information systems. This program will provide graduate-level education in IT for students preparing to enter the high-tech workforce and those already in the workforce who wish to update and enhance their skills. The course of study can be completed as a stand-alone graduate certificate or applied to the M.S. degree program in Applied Information Technology. The program is intended for students who have a bachelor's degree in information technology, computer science, computer information systems or a related field who will enter the program for advanced studies. The program may also be of interest to:

- Persons who do not have a bachelor's degree in the field, but who are currently employed in the IT field and are seeking additional academic studies for professional growth or to advance their career.
- Persons who have a bachelor's degree in a discipline other than IT who are seeking preparation for careers in this field.

For additional information, contact the program director, Dr. Ali Behforooz, 410-704-4909, CAIT@towson.edu, www.towson.edu/CAIT.



## Certificate Requirements

AIT 600	Information Technology Infrastructure (3)
AIT 610	Systems Development Process (3)
AIT 624	Software Engineering Fundamentals (3)
AIT 626	Advanced Topics in Software Engineering (3)
AIT 725	Case Studies in Software Engineering (3)

## BIOLOGY

Degree: Master of Science

Program Directors: L. Scott Johnson and

Larry Wimmers

410-704-2766

lwimmers@towson.edu

The Master of Science degree in Biology is intended to provide students with a solid foundation in the major subdisciplines of biological study and advanced training in several select subdisciplines. Students may obtain a degree through a combination of course work and the completion of a major research project, the results of which are prepared for publication in the form of a thesis. Students in the thesis track will concentrate their course work and research efforts in one of two areas, Molecular, Cellular and Microbiology or Organismal Biology and Ecology. The thesis track provides the necessary background and experience for those who plan further study for their Ph.D., for those whose employment requires research training, and for those who wish to teach in community colleges. Graduate teaching and research assistantships are awarded on a competitive basis to full-time thesis students. Students may choose alternatively to obtain a degree entirely through course work and, optionally, a small research project. This non-thesis track is designed for those who want a broader background in biology, including secondary school teachers. A diverse course offering is available in the evening to accommodate working students.

Greater Baltimore is a center of high technology and biomedical research. In addition, the region's rapid growth and development has stimulated concerns about environmental issues and placed strains on the educational system. As a consequence, graduates with master's-level training are sought by research facilities and private laboratories, environmental consulting firms, zoos and aquaria, and public and private secondary schools.

## Admission Requirements

- Minimum of 24 undergraduate credits in biology.
- Course work in general chemistry, organic chemistry and physics.
- A grade point average (GPA) of 3.00 in previous biology course work. An overall GPA (i.e., in biology and all other courses) of 3.00 is required for full admission. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study. Students lacking key prerequisites and/or having a GPA of 2.50-2.99 may be given conditional admission. Any student admitted conditionally may be required to make up deficiencies in prerequisites and/or achieve a GPA of 3.00 in their first 9 graduate credits taken at Towson University.

## Application to the Program

- Send to the Graduate School, Towson University, 8000 York Rd., Towson MD 21252-0001: General application form, application fee, and official transcripts.
- Send to the Graduate Program Director, Department of Biology, Towson University, 8000 York Rd., Towson MD 21252-0001: Supplemental Application for M.S. Degree in Biology (available from the program director at address above or at the departmental Web site) and three letters of recommendation from instructors or supervisors familiar with the student's record, aptitude and potential for graduate work.

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- Students who are applying to do thesis research must also submit scores from the Graduate Record Examination-General Test to the Biology Graduate Program Director at the above address. Scores from GRE Subject Examination in Biology are recommended but not required. No GRE scores are required for students applying to do a non-thesis degree.

### Degree Requirements

Students complete 30 credits of course work. No more than three courses may be taken at the 500 level. No more than two courses may be taken in disciplines outside of biology and only with approval of the graduate director (non-thesis students) or supervisory committee (thesis students). Thesis students earn 6 credits of course work (as BIOL 898 - Thesis) upon completion and successful defense of the thesis. All thesis track students must complete and successfully defend a thesis before the degree is awarded.

### Required Courses

- BIOL 602    Molecular Biology (3)  
BIOL 604    Mechanisms in Animal Physiology (3)  
BIOL 610    Population and Community Biology (3)  
BIOL 797    Graduate Seminar (1)

NOTE: A student may be excused from BIOL 602, 604 and/or 610 at the discretion of the graduate director (non-thesis students) or supervisory committee (thesis students) provided that: 1) the student successfully completed appropriate advanced course-work in the undergraduate curriculum or 2) the student scored at or above the 70th percentile in the subsection of the GRE Biology Subject Examination that corresponds to the course in question. Students earning an exemption must still complete 30 credits of course work.

### Electives

Students in the thesis track must take a minimum of 9 credits of course work in the

areas of molecular, cellular or microbiology or the areas of organismal biology or ecology. A list of appropriate courses is available from the program director. No restrictions are placed on elective course work for students in the non-thesis track.

### COMPUTER SCIENCE

Degree: Master of Science

Program Director: Ramesh K. Karne  
410-704-3955

rkarne@towson.edu

This program provides a comprehensive approach to advanced study in computer science. It also prepares professionally responsible individuals to hold scientific and technical positions in the area of computing applications.

Such jobs are found in research and development departments; in federal, state and local government agencies; in computer software development companies; in Internet and Web development companies; and in companies involved in development of hardware and software products for applications in aerospace, biological, chemical, medical and genetic research. Graduates will also be prepared for further work at the doctoral level.

The main objectives of the program are: 1) to give students the opportunity to study and attain knowledge in current computer science specialties; 2) to develop student ability to apply computer science problem-solving methods and tools to realistic research and industry-related problems; 3) to equip students with the tools and knowledge necessary for contributing to the needs of a high-technology society through preparation for continued learning; 4) to prepare students for advanced graduate work in computer science.

### Admission Requirements

- A baccalaureate degree in computer science or a baccalaureate degree in any other field and completion of one to three

preparatory courses from among MATH 363, COSC 304, COSC 305, as determined by the graduate program director.

- An undergraduate grade point average of 3.00 for full admission, 2.75 for conditional admission, or 2.50 for provisional admission are required. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study. For international students, a TOEFL score of 550 for full admission and 500 for conditional admission is required.

### Degree Requirements

- Satisfactory completion of any assigned preparatory courses. (This only applies to students who do not have an undergraduate degree in computer science.)
- Satisfactory completion of the requirements for the M.S. in Computer Science, or M.S. in Computer Science with the Software Engineering Track. At least 24 credits of degree work must be at 600 to 800 levels.

### M.S. in Computer Science (33 credits)

#### Group A-Required Courses (15-18 credits)

COSC 519	Operating Systems Principles (3)
COSC 578	Database Management Systems I (3)
COSC 600	Advanced Data Structures and Algorithm Analysis (3)
COSC 650	Computer Networks (3)
COSC 897	Graduate Project/Internship (3) or
COSC 898	Computer Science Thesis (6)

#### Group B-Elective Courses (15-18 credits)

Any 500/600/700 level COSC courses that are not taken in Group A will be counted as electives. Note that students may not count more than 9 credits of 500-level courses toward their graduation requirements.

### M.S. in Computer Science: Software Engineering Track (33 credits)

#### Group A-Required Courses (21-24 credits)

COSC 519	Operating Systems Principles (3)
COSC 600	Advanced Data Structures and Algorithm Analysis (3)
COSC 609	Software Project Management (3)
COSC 612	Software Engineering I (3)
COSC 614	Software Engineering II (3)
COSC 716	Object-Oriented Methodology (3)
COSC 897	Graduate Project/Internship (3) or
COSC 898	Computer Science Thesis (6)

#### Group B-Elective Courses (9-12 credits)

Any 500/600/700 level COSC courses that are not taken in Group A will be counted as electives. NOTE: Students may not count more than 9 credits of 500-level courses toward their graduation requirements.

### Transfer Courses

A student can transfer up to two graduate level courses from a recognized institution with the approval from the graduate program director.

### Prerequisite Courses

MATH 363	Mathematical Structures for Computer Science (4)
COSC 304	Fundamentals of Computer Sciences (6)
COSC 305	Fundamentals of Data Structures and Algorithm Analysis (6)

Both MATH 363 and COSC 304 can be taken together in the same semester; COSC 305 must be taken after successful completion of COSC 304. These prerequisites are not required for students who have a baccalaureate degree in computer science. The MATH 363 course is not required for stu-

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dents who have an engineering or mathematics baccalaureate degree. Students with no engineering, mathematics or computer science degree background must take all three prerequisites.

Students may repeat prerequisite courses no more than two times before taking graduate-level courses.

### ENVIRONMENTAL SCIENCE

Degree: Master of Science

Post-baccalaureate Certificate

Program Director: Jane Wolfson

410-704-4920

The Master of Science degree in Environmental Science will begin to offer courses in fall 2002. This interdisciplinary program focuses on environmental issues and problems faced by metropolitan areas. The program is for individuals who are in the environmental work force, are looking to enter the environmental work force, or who are public school teachers who wish to expand their knowledge of environmental sciences of metropolitan areas so they can teach in this specialty. There are four tracks in the program: Water Resource Management and Assessment, Biological Resource Management, Wetland Assessment and Management and Environmental Spatial Analysis. Program graduates are well prepared to work in the environmental consulting area, education, industry, federal, state and county environmental agencies, and nonprofit environmental groups.

### Admission Requirements

- Admission to the graduate school.
- Undergraduate degree (B.A. or B.S.) in Biology, Chemistry, Geology or Environmental Science with a minimum GPA of 3.00 for full admission, and a minimum GPA of 2.50 for provisional admission.
- Students with an undergraduate degree in another area are required to demonstrate completion of the following courses with a minimum GPA of 3.00:

- two semesters of Introductory Biology with laboratory
- two semesters of Introductory Chemistry with laboratory
- one semester of Statistics and one semester of Calculus  
or
- two semesters of Calculus

### Degree Requirements

#### Option 1: Master of Science with Thesis (30 credits)

Core Courses

- ENVS 6xx Topics in Environmental Geology (4)  
ENVS 6xx Environmental Chemistry (4)  
ENVS 6xx Environmental Law and Regulation (3)  
ENVS 6xx Ecosystems Ecology (4)  
ENVS 7xx Research Thesis (6)  
Electives (9)

#### Option 2: Non-thesis Master of Science (30 credits)

The core courses are identical to those in Option 1 except for thesis.

- ENVS 7xx Research Practicum (3)  
Electives (12)

#### Option 3: Environmental Science Certificate (18 credits)

- Five approved courses (15)  
ENVS 7xx Research Practicum (3)

For more information, contact the Graduate School, 410-704-2501.

### MATHEMATICS EDUCATION

Degree: Master of Science

Program Director: Lawrence Shirley

410-704-3817

lshirley@towson.edu

The Master of Science in Mathematics Education program at Towson University provides mathematics teachers with advanced study in mathematics, mathematics education and general education. The program of-



fers teachers additional experience in higher-level mathematics to enhance their teaching with additional depth and breadth of content. At the same time, it strengthens their background in school mathematics curriculum, instructional practices, assessment and technology. It also provides them a relevant way of satisfying their in-service requirements for professional advancement.

The program is open to certified secondary mathematics teachers with a strong mathematics background. Students take required and elective courses in mathematics content, mathematics education, and general areas of education. They may select either a research option or one on educational leadership.

It is expected that graduates of this program will become leaders in mathematics education as master teachers, curriculum developers, mathematics supervisors, and other positions that improve the teaching of mathematics in secondary schools. The special strength of this program is the opportunity to study higher mathematics content without leaving the field of school mathematics. The program was designed with on-the-job teachers in mind, with part-time studies in the evenings and summers available; however, full-time students are also welcomed.

The program consists of 36-39 credits; including 12 credits of required courses in mathematics education and the culture and philosophy of mathematics, 12 credits of electives in mathematics content, and 12-15 credits of electives in education, 6 of which may be a mathematics education thesis.

### Admission Requirements

Applicants must meet the general requirements for graduate study outlined in the Towson University *Graduate Catalog*. The applicant must possess current certification for teaching secondary school mathematics. The applicant should have an undergraduate degree (or M.A.T.) in mathematics with a secondary education concentration or the equivalent, with a minimum undergraduate grade point average of 3.00 for full admission, 2.75 for conditional admission, and 2.50 for provisional admission. All GPA calculations for admission are based upon the

last 60 credits of undergraduate and post-baccalaureate study.

### Degree Requirements

The student is required to successfully complete a total of at least 36-39 credits of course work (with no more than 9 credits below the 600 level), as outlined below.

#### Section A: Mathematics Knowledge

- Experiencing good mathematics teaching, and knowledge of mathematics

Students complete five courses, including MATH 602, one course from each of the following three categories, and one additional elective from any of these categories.

MATH 602 Cultural and Philosophical Background of Mathematics  
(3) (required)

#### *Algebra/Calculus*

- MATH 563 Linear Algebra (3)  
MATH 567 Theory of Numbers (3)  
MATH 568 Algebraic Structures (3)  
MATH 576 Introductory Real Analysis (3)  
MATH 635 Applied Numerical Analysis (3)  
MATH 636 Linear and Nonlinear Programming (3)  
MATH 651 Mathematics of Fuzzy Logic (3)  
MATH 677 Advanced Mathematical Modeling (3)

#### *Geometry*

- MATH 551 Graph Theory (3)  
MATH 557 Differential Geometry (3)  
MATH 653 Topics in Geometry (3)  
MATH 671 Chaotic Dynamics and Fractal Geometry (3)

#### *Probability/Statistics/Stochastics*

- MATH 531 Probability (3)  
MATH 532 Mathematical Statistics (3)  
MATH 533 Applied Regression and Correlation Analysis (3)  
MATH 534 Nonparametric Statistical Methods (3)  
MATH 630 Statistics—An Integrated Approach (3)  
MATH 631 Topics in Probability (3)  
MATH 632 Computational Stochastic Modeling (3)

## Section B: Students as Learners

Students complete two courses in this category.

- EDUC 560 Teaching in a Multicultural/  
Multiethnic Society (3)
- EDUC 614 Assessment and Evaluation in  
Education (3)
- SCED 621 Individualizing Learning in the  
Secondary School (3)
- SCED 635 Discipline and Classroom  
Management in Secondary  
Schools (3)
- SCED 647 Advanced Teaching and  
Learning Processes (3)
- PSYC 603 Human Learning (3)

## Section C: School Mathematics and Pedagogy

Students complete both courses in this category.

- MATH 626 Technology in School Mathe-  
matics Teaching and Learning  
(3) (required)
- MATH 627 Curriculum Issues in Sec-  
ondary School Mathematics  
(3) (required)

## Section D: Professional Development

Students choose three courses from either the Research Option or the Leadership Option.

### *Research Option*

- MATH 625 Seminar in Mathematics  
Education for Secondary  
School Teachers (3)
- MATH 898 Thesis in Mathematics  
Education (6)

*And one of the following courses:*

- PSYC 687 Advanced Experimental  
Design I (3)
- PSYC 688 Advanced Experimental  
Design II (3)
- EDUC 605 Research and Information  
Technology (3)
- EDUC 734 The Teacher as Researcher (3)
- EDUC 761 Research in Education (3)

### *Leadership Option*

- MATH 625 Seminar in Mathematics  
Education for Secondary  
School Teachers (3)

*And any two of the following courses:*

- EDUC 603 School Law (3)
- ISTC 702 Educational Leadership and  
Technology (3)
- PSYC 651 Techniques of Intervention (3)
- SCED 625 Teaching in the Middle  
School (3)
- SCED 643 Administration of the  
Secondary School (3)
- SCED 649 Teaching Gifted Students in  
the Secondary School (3)
- SCED 651 Techniques for Teaching  
Special Needs Adolescents and  
Adults (3)
- SCED 683 Staff Development and  
Supervisory Practices in  
Secondary Schools (3)





## INTERDISCIPLINARY PROGRAMS

Interdisciplinary programs have become an increasingly important part of Towson University's goal of being a premier metropolitan university. The rise of new interdisciplinary fields and revision of traditional curricula are reflected in the diverse group of programs listed here. These programs enhance the strong liberal arts and sciences core while preparing students for professional and applied fields. They also provide opportunities for new forms of student learning and build on the strengths of the faculty.

As Towson University strives to provide all of its students with the knowledge and skills for entry into the professional world, interdisciplinary programs will continue to expand throughout the curriculum. These programs will also help to create an environment that stimulates commitment to lifelong learning and allows for continued personal growth.

Donna Wagner, Chair  
Interdisciplinary Council  
[dwagner@towson.edu](mailto:dwagner@towson.edu)

### Master's Degree Programs

Applied Gerontology  
Human Resource Development  
Liberal and Professional Studies  
Women's Studies

### Certificate Programs

Management and Leadership Development  
Women's Studies

### Certification

Post-Master's Certification for Administrator I





## APPLIED GERONTOLOGY

Degree: Master of Science  
 Program Director: Donna L. Wagner  
 410-704-4643  
 dwagner@towson.edu

The graduate program in Applied Gerontology prepares students to work in community settings serving the needs of the older population. The degree provides a basic foundation of knowledge, education and skills to students so they may move into positions in the fields of health, housing, social services or private sector enterprises serving older consumers.

### Admission Requirements

- A bachelor's degree with a minimum of 9 credits of upper-level course work in social sciences and/or experience working in the field of gerontology and/or course work or training in the field of gerontology.
- Two letters of recommendation.
- A one- to two-page essay discussing career goals and the planned focus of the graduate work.
- Meet the minimum requirements for admission to Towson University's Graduate School.

### Degree Requirements

- Completion of 36 credits with a cumulative GPA of 3.00 or better.
- Satisfactory completion of core required courses.

GERO 601	Seminar in Professional Gerontological Issues (3)
PSYC 610	Advanced Psychology of Aging (3)
BULA 6xx	Legal Issues in Gerontological Practice (3)
HLTH 619	Organizing Systems of Care for Chronically Ill and Physically Dependent Populations (3)
GERO 610	Applied Gerontological Research Methods (3)
GERO 6xx	Gerontological Practicum (Internship and/or Independent Research) (3)

- Satisfactory completion of 18 hours of graduate electives as approved by academic adviser.

## HUMAN RESOURCE DEVELOPMENT

Degree: Master of Science  
 Program Director: Larry Froman  
 410-704-4685  
 lfroman@towson.edu

The Master of Science in Human Resource Development (HRD) is an interdisciplinary program designed to provide students with specific knowledge and practical skills within a variety of human resource fields. Focusing on the disciplines of psychology, management, instructional technology; education, and communications, the curriculum is designed to meet the needs of individuals with varied academic backgrounds and professional experience. The program emphasizes the application of theory and research to practical human resource issues within business, government and nonprofit organizations and education. The program consists of two tracks: General and Educational Leadership.

The General Track is designed for individuals seeking to enter the human resource field, mid-career professionals seeking opportunities for professional development and career advancements, working adults seeking a career change, and recent undergraduates who wish to pursue graduate study. Applicants do not need prior work experience in human resources to be eligible for admission.

The Educational Leadership Track is designed for certified teachers and other licensed professionals working in schools who aspire to become educational leaders and administrators at local and state levels. This interdisciplinary program is approved by the Maryland State Department of Education (MSDE) for those seeking certification as Administrator I.

### Admission Requirements

- No specific undergraduate major is required.
- The minimum GPA required for full admission is 3.00. Students who have a

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minimum GPA of 2.80 may be granted admission on a competitive, space available basis.

- Two letters of recommendation are required from individuals who can attest to the applicant's academic background, professional experience and/or personal qualities. Those seeking admission to the Education Leadership Track must have one letter of recommendation from a school administrator.
- A one-page personal statement is required in which the applicant discusses his or her reasons for seeking admission to the program and how the program will meet the applicant's professional goals.

### Degree Requirements

**NOTE:** Students enrolled in the program prior to fall 2001 have the option of either using their current program requirements or using the new requirements listed below.

- Students must take a minimum of 36 credits as prescribed in their program and selected in consultation with the adviser.
- Students must pass the comprehensive exam in Human Resource Development appropriate to their selected program track. Students are eligible to take the exam after they have completed a minimum of 24 credits and prior to exiting the program.
- Educational Leadership students must submit a portfolio in conjunction with their Internship experiences.

### General Track

#### Required Core (12 credits)

General Track students must take the following core courses listed below:

HRD 601	Introduction to Human Resources (3)
HRD 627	Seminar in Training and Development (3)
HRD 641	Change in the Workplace (3)
HRD 642	Organizational Behavior (3)

#### Core Electives (12-24 credits)

Students must take a minimum of 12 credits and may take a maximum of 24 credits.

Students must choose a minimum of four courses from the list below:

HRD 602	Leadership Theory and Practice (3)
HRD 603	Professional Development in HRD (3)
HRD 604	Compensation and Benefits Management (3)
HRD 629	Personnel Selection (3)
HRD 644	Team Building (3)
ISTC 667	Instructional Development (3)
ISTC 702	Educational Leadership and Technology (3)
MNGT 601	Administrative Theory and Practice (3)
PSYC 606	Career Development (3)

#### Electives For General Track Students Only

Students can complete the 36-credit requirement of the program by selecting from any of the courses in Groups 1 through 4.

#### Group 1: Training, Work Force Development and Technology

COMM 518	Communication Training and Development (3)
COSC 605	Human Factors and Computer Interaction (3)
EDUC 605	Research and Information Technology (3)
HLTH 639	Education and Training in Health Care (3)
ISTC 605	Web-Based Instruction in Education (3)
ISTC 617	Distance Education in Theory and Practice (3)
ISTC 633	Instructional Video (3)
ISTC 655	Media Design and Production I (3)
ISTC 663	Applied Psychology of Learning (3)
ISTC 687	Computer-Based Instruction (3)
WRIT 733	Communication Management (3)
HRD 695	Independent Study or Internship in HRD (3)

## Group 2: Employee Relations

- COMM 601 Theories and Research in Intercultural Communication (3)
- EDUC 560 Teaching in a Multicultural/Multiethnic Society (3)
- EDUC 646 Human Relations and the Professional (3)
- HLTH 627 Health and Worker Performance (3)
- MNGT 602 Conflict Resolution in Commerce and Industry (3)
- PSYC 610 Advanced Psychology of Aging (3)
- PSYC 524 Social Psychology (3)
- PSYC 567 Midlife Development (3)
- PSYC 603 Human Learning (3)
- PSYC 605 Counseling Techniques (3)
- PSYC 611 Developmental Psychology (3)
- PSYC 637 Counseling Strategies for Drug and Alcohol Abuse (3)
- SOCI 543 Minority Groups (3)
- SOCI 550 Sociology of Aging (3)
- SOCI 559 Social Gerontology (3)
- WMST 601 Women, Gender, and the Workplace (3)
- HRD 695 Independent Study or Internship in HRD (3)

## Group 3: Organizational and Career Development

- COMM 519 Organizational Communication (3)
- COMM 522 Conference and Meeting Management (3)
- SOCI 531 Organizations (3)
- SOCI 534 Industrial Sociology (3)
- SOCI 539 Community Organizations (3)
- SOCI 557 Social Welfare (3)
- HRD 695 Independent Study or Internship in HRD (3)

## Group 4: Human Resources Management

- ECON 541 Labor Economics and Labor Relations (3)
- HLTH 541 Legal and Ethical Issues in Health Administration (3)
- HLTH 617 Health Administration (3)
- HLTH 647 Health Care Financial Management (3)

- MNGT 603 Human Resource Management in a Global Economy (3)
- HRD 695 Independent Study or Internship in HRD (3)

## Educational Leadership Track

Program Adviser: Roxana DellaVecchia  
410-704-2422  
rdellavecchia@towson.edu

### Core Courses (12 credits)

Educational Leadership students must take the following core courses listed below:

- HRD 641 Change in the Workplace (3)
- HRD 642 Organizational Behavior (3)
- HRD 644 Team Building (3)
- HRD 602 Leadership Theory and Practice (3)

### Core Electives (24 credits)

Educational Leadership students must take the following eight courses listed below. Substitutions are only permitted in consultation with the adviser.

- ECED/ELED 665/
- SCED 741 Curriculum Theory and Development (3)
- EDUC 745 School Budgeting and Fiscal Issues (3)
- ELED 781/
- SCED 683 Seminar in Supervision (3)
- EDUC 603 School Law (3)
- EDUC 605 Research and Information Technology (3)
- ELED 797/
- SCED 797 Internship in Educational Leadership (3)
- ISTC 702 Educational Leadership and Technology (3)
- MNGT 601 Administrative Theory and Practice (3)
- or
- ELED 716/
- SCED 643 Administration of the Schools (3)

## POST-MASTER'S CERTIFICATION FOR ADMINISTRATOR I

Program Adviser: Roxana DellaVecchia  
410-704-2422  
rdellavecchia@towson.edu

This post-master's program is MSDE-approved for those who seek Administrator I certification and did not complete an MSDE-approved master's program for Administrator I.

This program allows those education professionals currently certified or licensed, and working in schools or school systems, to be eligible to receive Administrator I certification for Assistant Principal or Supervisor. Certification for Administrator II requires the passing of the ISLLA exam in addition to the requirements for Administrator I.

### Program of Study

Students enrolled in this program must take the following six courses:

- ELED 665/
- SCED 741 Curriculum Theory and Development (3)
- ELED 781/
- SCED 683 Seminar in Supervision (3)
- ELED 716/
- SCED 643 Administration of the Schools (3)
- EDUC 603 School Law (3)
- ELED 797/
- SCED 797 Internship I Educational Leadership (3)
- HRD 644 Team Building (3)

## LIBERAL AND PROFESSIONAL STUDIES

Degree: Master of Arts  
Program Director: John Webster  
410-704-2165  
jwebster@towson.edu

The Master of Arts in Liberal and Professional Studies is an interdisciplinary program that crosses traditional academic boundaries

and provides a solid intellectual framework within which students can create their own degree plans. The core curriculum of the program focuses on the emerging knowledge and new skills needed to learn and work in a culturally diverse society, increasingly influenced by information technology and complex systems. The degree is particularly well suited for students who wish to integrate specialized study with a critical understanding of the broader developments and theories transforming their field of endeavor. In consultation with the program director, entering students construct an individualized plan of study combining core seminars with graduate-level courses selected from liberal and fine arts, social and human sciences, and applied science and technology. Degree plans can be built around traditional academic disciplines or practical study in many areas:

- Digital media and communication
- Information technology and applied systems theory
- Management and administration
- Public policy and regional planning
- Human resources
- Health care
- Education

The program is committed to offering working professionals flexible and convenient ways to gain advanced degrees through collaborative learning, Internet-based course work and independent study.

### Admission Requirements

A grade point average of 3.00 (2.75 for conditional admission, 2.50 for provisional admission) is required. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study. The applicant must submit a brief essay discussing reasons for entering the program and how the program will allow the applicant to achieve personal and professional goals. Send the essay directly to the program director.



## Degree Requirements

### Required Core (12 credits)

- LBPS 601 Introductory Seminar in Liberal Studies (3)  
 A 600/700-level independent study course approved by the program director (3)  
 An advanced writing course (3)  
 LBPS 602 Culminating Seminar in Liberal and Professional Studies (3)

The introductory and culminating LBPS courses must be completed with a grade of A or B in each. The courses may be repeated once for the purpose of grade change.

### Elective Core (24 credits)

Elective courses must be approved by the program director and should be taken from at least three disciplines with a maximum of 15 credits in any one discipline. No more than three 500-level graduate courses can be counted toward a degree. Twelve credits of the elective core must be completed at Towson University. The remaining 12 credits can be taken at any other University System of Maryland school or Morgan State University.

## MANAGEMENT AND LEADERSHIP DEVELOPMENT CERTIFICATE

Program Director: Filiz Tabak  
 410-704-3541  
 ftabak@towson.edu

The Management and Leadership Development program is a 15-credit certificate designed for those who hold or seek leadership roles in both the profit and nonprofit sectors. The curriculum offers students who have no prior management training an opportunity to learn the administrative and strategic skills required to lead a successful organization. All courses in the program emphasize a hands-on approach to problem solving and decision making. The goal of the program is to train managers and leaders who can communicate vision, enhance human potential, and take a proactive approach to the social and economic problems of the metropolitan area.

## Certificate Requirements

Students seeking the Management and Leadership Development Certificate must be admitted to the Liberal and Professional Studies graduate program and complete the following courses:

- LBPS 601 Introductory Seminar in Liberal Studies (3)  
 MNGT 601 Administrative Theory and Practice (3)  
 WRIT 619 Communication in the Profit/Nonprofit sectors (3)  
 PSYC 644 Team Building (3)  
 MNGT 608 Project Management (3)

## WOMEN'S STUDIES

Degree: Master of Science  
 Program Director: Esther Wangari  
 410-704-2580  
 ewangari@towson.edu

The Master of Science in Women's Studies is an interdisciplinary and multidisciplinary program that provides students with both a basic groundwork in the field of women's studies and a combination of skills that can be used in diverse fields and across disciplines. Graduates of the program will have the academic preparation to pursue careers in a variety of public and private organizations. They will be prepared to adapt to changing environments in business, health professions and nonprofit organizations in a regional, national or international context.

The program is organized around a required core of women's studies theory courses, skills courses (to provide a methodological base of communication, research and computer skills), and a concentration selected by the student. Students may select a concentration from one of four areas: Women and Gender in the Workplace, Women and Health (with three options), Women in an International Context, and Women and Public Policy. Each concentration will include a required WMST 6xx course.

A graduate adviser from the Women's Studies Program will be assigned to each student. Students may select their own adviser once they are in the program. After the com-

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pletion of the core program and in consultation with their graduate advisers, students will construct an advanced and individually tailored program of study in one of the four concentrations listed above. Students who wish to enhance their course work with practical experience may take the internship course.

### Admission Requirements

- A bachelor's degree with an undergraduate grade point average of 3.00 is required. All GPA calculations for admission are based upon the last 60 credits of undergraduate and post-baccalaureate study.
- A 2.75 undergraduate average is required for conditional admission and a 2.50 GPA for provisional admission. An admission exception policy is in place for eligible candidates, including those whose undergraduate degrees were obtained at least 10 years earlier.
- An introduction to women's studies course (Towson University's WMST 231 Women in Perspective, or a comparable course).
- An admission essay in which the applicant describes her or his qualifications for graduate study in women's studies and reasons for pursuing the master's degree. Send directly to program director.
- Two letters of recommendation. Use the Recommendation Form found in the Graduate School Application Packet, and send it to the program director.

### Degree Requirements

The M.S. in Women's Studies requires 36 credits.

### Required Core Courses (15 credits)

Women's Studies Theory Courses (6 credits)  
WMST 607 Advanced Feminist Theory (3)  
WMST 603 The Diversity of Women (3)

### Women's Studies Skills Courses (9 credits)

WMST 602 Women and Communication (3)  
WMST 609 Applied Research Methods and Skills I (3)\*  
WMST 610 Applied Research Methods and Skills II (3)\*

\*Requires adequate computer skills to be determined by Tech Check available from program director.

### Concentration Courses (15 credits)

Women's Studies introductory course in the selected concentration (3)  
Electives chosen from an approved list in consultation with an adviser (12)

### Culminating Project (6 credits)

WMST 898 Thesis  
or  
WMST 796 Internship

### Optional (3-6 credits)

WMST 620 Field Experience (3-6)

### Women and Gender in the Workplace (15 credits)

Required: WMST 601 Women and Gender in the Workplace (3)

Electives (12 credits) selected from an approved list, including the following.

#### Highly Recommended Courses:

ANTH 568 Development and Industrialization in Cross-Cultural Perspective (3)  
ECON 574 Economic Issues of Gender (3)  
PSYC 641 Change in the Workplace (3)  
PSYC 642 Organizational Behavior (3)  
SOC 531 Deviance and Organizations (3)

### Other Optional Courses:

ANTH 521 Gender in Cross-Cultural Perspectives (3)  
HIST 506 Women in 20th Century U.S. History (3)

HIST 558	Workers and Work in the United States (3)
HIST 546	History of American Business
HIST 592	Historical Themes: Comparative History of the Modern Family (3)
PSYC 610	Advanced Psychology of Aging (3)
PSYC 524	Social Psychology (or SOCI 513) (3)
PSYC 532	Cross-Cultural Psychology (3)
PSYC 567	Midlife Development (3)
PSYC 547	Sex Differences: Psychological Perspectives (3)
PSYC 577	Cross-Cultural Psychology (3)
PSYC 610	Advanced Psychology of Aging (or SOCI 575) (3)
SOCI 575	Gender and Aging (or PSYC 610) (3)

# **Women and Health (15 credits)**

Required: WMST 613 Women and Health (3)  
Electives (12 credits) selected from an approved list, including any distribution of the following, or the student may specialize in one of the three areas of training enumerated below.

## **Women and the Health Care System**

GEOG 652	Seminar in Medical Geography (3)
HCMN 541	Legal and Ethical Issues in Health Administration (3)
HLTH 611	Current Literature in Health (3)
HLTH 615	Community Health: Qualitative and Quantitative Elements (3)
HLTH 625	Research Methods in Health (3)
HLTH 627	Health and Worker Performance (3)
HLTH 631	Program Planning in Health Education (3)
HLTH 633	Health Care Systems (3)
HLTH 637	Skill Development: Leadership in Health Care Setting (3)
HLTH 645	Health Care Policy (3)

HLTH 647	Health Care Financial Management (3)
HLTH 651	Planning and Marketing Health in Business and Industry (3)
OCTH 611	Advanced Occupational Therapy Theory and Philosophy (3)
OCTH 613	Advanced Research Methods in Occupation-Based Practice (3)
PHIL 561	Ethics of Medicine and the Life Sciences (3)
PSYC 547	Sex Differences: Psychological Perspectives (3)
PSYC 557	Gender Identity in Transition (3)
PSYC 570	Special Topics (3)
PSYC 532	Cross-Cultural Psychology (3)
PSYC 667	Psychosocial Aspects of Disability (3)
SOCI 535	Medical Sociology (3)
WMST 536	Women and Medicine (3)
WMST 539	Reproductive Technologies and the Future of Motherhood (3)
WMST 601	Women and Gender in the Workplace (3)
WMST 611	Women, Public Policy, and Social Change (3)

## **Aging and Women's Health Issues**

GEOG 67x	Special Topics: Seminar in the Geography of the Aged (3)
HLTH 511	Health and Later Maturity: The Aging Process (3)
HLTH 611	Current Literature in Health (3)
OCTH 631	Community Gerontology (3)
PSYC 532	Cross-Cultural Psychology (3)
PSYC 567	Midlife Development (3)
PSYC 570	Special Topics (3)
PSYC 571	Special Topics (3)
PSYC 605	Counseling Techniques (3)
PSYC 610	Advanced Psychology of Aging (3)
PSYC 667	Psychosocial Aspects of Disability (3)
SOCI 550	Sociology of Aging (3)

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- SOCI 558 Sociology of Death, Dying and Bereavement (3)  
 SOCI 559 Social Gerontology (3)  
 WMST 533 Women and Aging (3)  
 WMST 536 Women and Medicine (3)

### Violence Against Women (Rape, Sexual Assault, and Relationship Violence)

- HLTH 570 Health Workshop (3)  
 HLTH 625 Research Methods in Health (3)  
 HLTH 645 Health Care Policy (3)  
 PHIL 561 Ethics of Medicine and the Life Sciences (3)  
 PSYC 57x Special Topics: Psychology of Women (3)  
 PSYC 547 Sex Differences: Psychological Perspectives (3)  
 SOCI 55x Women and Crime (3)  
 SOCI 551 Deviant Behavior (3)  
 SOCI 553 Theories of Crime (3)  
 WMST 536 Women and Medicine (3)  
 WMST 538 Women and Sexuality (3)

### Women in an International Context (15 credits)

#### Foreign Language Requirement:

Students should plan on achieving a level of proficiency in one foreign language that is the equivalent of four semesters of college-level foreign language training. This requirement may be completed by taking Elements I and II and Intermediate I and II or by an Equivalence Examination at the intermediate level administered each November by the Department of Modern Languages. Students who have completed several years of foreign language in high school should consult with the chair of modern languages to determine the number of courses or credits needed to fulfill this requirement for the major.

Required: WMST 605 Women in an International Context (3)

Electives (12 credits) selected from an approved list, including the following, based on a regional or thematic focus to be determined in consultation with an adviser:

- ANTH 521 Gender in Cross-Cultural Perspective (3)

- ANTH 546 Wealth, Power, and Politics in Cross-Cultural Perspective (3)  
 ANTH 553 Latin American Women in the Americas (3)  
 ANTH 565 North American Indians (3)  
 ANTH 566 South American Indians (3)  
 ANTH 567 Peoples of the Middle East (3)  
 ANTH 569 Tradition and Revolution in Latin American Society (3)  
 GEOG 67x Seminar in Social Geography (3)  
 HIST 508 Life Histories of African Women (3)  
 MNGT 603 Human Resource Management in a Global Economy (3)  
 WMST 570 Topics in Women's Studies (3)  
 WMST 611 Women, Public Policy, and Social Change (3)

### Women and Public Policy (15 credits)

Required: WMST 611 Women, Public Policy, and Social Change (3)

Electives (12 credits) selected from an approved list, including the following:

- ECON 574 Economic Issues of Gender (3)  
 HIST 506 Women in 20th Century U.S. History (3)  
 HIST 526 Gays and Lesbians in U.S. History (3)  
 HIST 558 Workers and Work in the United States (3)  
 HIST 592 Historical Themes: Comparative History of the Modern Family (3)  
 POSC 505 Urban Government and Politics (3)  
 POSC 515 The Presidency (3)  
 POSC 516 Congress (3)  
 POSC 517 American Political Parties (3)  
 POSC 550 Group Politics and Public Opinion (3)  
 POSC 570 Special Topics: Women and the Law (3)  
 POSC 581 Seminar: Public Policy Analysis (3)  
 SOCI 523 Social Change (3)  
 SOCI 533 Political Sociology (3)  
 SOCI 541 Class, Status and Power (3)  
 SOCI 557 Social Welfare (3)  
 WMST 537 Feminism (3)  
 WMST 570 Topics in Women's Studies (3)



- WMST 5xx Women and Aging (3)  
WMST 601 Women and Gender in the  
Workplace (3)  
WMST 605 Women in an International  
Context (3)  
WMST 613 Women and Health (3)

### **CERTIFICATE IN WOMEN'S STUDIES**

Program Director: Esther Wangari  
410-704-2580  
ewangari@towson.edu

A post-baccalaureate certificate in Women's Studies was recently approved. For more information, contact the program director.





# Student Services

## Albert S. Cook Library

410-704-2456 Circulation

410-704-2461 Information Desk

410-704-2462 Reference Desk

The Albert S. Cook Library, located near the center of campus, serves as the hub of print, media and electronic information resources for the university. The collection of approximately 539,000 volumes, 771,000 microform units, and over 2,100 periodical subscriptions has been selected to support the university's curriculum. The library is a depository for Maryland state documents. Its scholarly collections include educational resource documents (ERIC microfiche), a collection of early English literature, a strong women's studies collection, and a microfilm set of early American periodicals. These materials are accessed through an integrated on-line catalog which displays not only the holdings of Towson but also the collections of other libraries in the University System of Maryland. A cooperative borrowing and delivery agreement with other USM libraries allows students to request books from other libraries. About 400 electronic journals and 65 electronic databases in business, literature, nursing and allied health, psychology, sociology and many interdisciplinary subject areas are available to Towson University students through the World Wide Web. Some of these databases include full text of journal articles. Journal articles not available in the Cook Library may be requested for delivery.

## African American Cultural Center

University Union, Room 317

410-704-2641

The African American Cultural Center (AACC) sponsors programs and activities that reflect the lifestyles, history and culture of people of African descent. The center also seeks to stimulate scholarship at Towson in the areas of African American, African-

Caribbean and African studies. The center sponsors the Towson University Gospel Choir, publishes a newsletter, *Ebony Notes*, hosts lectures and discussion groups, provides information and referrals, showcases amateur and professional artists, and sponsors the Visiting Lecturers Grant Program.

The center, which houses an ever-growing collection of art, music, and popular and scholarly literature, provides a comfortable setting in which to study, relax and socialize. Student or staff groups may reserve the center for meetings and informal gatherings.

The center houses a wealth of information concerning graduate schools, fellowships, scholarships, employment opportunities, and other news relevant to minority students, faculty and staff. The information is updated regularly. Students are invited to stop by often; no appointment is necessary.

## The Career Center at Towson University

Enrollment Services, Suite 332

410-704-2233

The Career Center staff helps students prepare and search for meaningful and satisfying careers. The center also provides services and information leading to academic internship opportunities and on- and off-campus, full-time and part-time employment. To learn more about the programs and services offered by The Career Center, visit the Web site, [www.towson.edu/careercenter](http://www.towson.edu/careercenter), or call for a schedule of information seminars.

## Career Center Services for Students

CareerConnections (Web-based resume system)

Workshops: resume writing, job search tips and interviewing techniques

Career Fairs/Job Fairs

Career advising

Career Resource Library

Graduate school information

### **Career Center Services**

- On-campus interviewing
- Student employment (on- and off-campus)
- Resume referral services
- Internships
- Professional Development Seminars

All employment opportunities are posted on the center's Web site.

### **Computing and Network Services**

Albert S. Cook Library, First Floor, Room 5  
410-704-5151

Office Hours:

Monday-Thursday, 8 a.m.-11:30 p.m.

Friday, 8 a.m.-5 p.m.

Saturday, 10 a.m.-6 p.m.

Sunday, 2 p.m.-6 p.m.

Towson's Computing and Network Services (CANS) Help Center is located in room 5 on the first floor of Cook Library. Graduate students may establish a computer account to access e-mail, news and Internet resources and to create Web pages. For more information about the university's technology resources, see the CANS Web page, [www.towson.edu/cans](http://www.towson.edu/cans).

### **Counseling Center**

Glen Esk

410-704-2512

Office Hours:

Monday-Friday, 8 a.m.-4:30 p.m.

Some evening appointments available

The Counseling Center provides a variety of professional services for students, including individual and group counseling, psychiatric services, consultation, outreach workshops, career development programs, and alcohol and drug treatment and education programs. All Counseling Center services are free and confidential.

### **Dining Services**

410-704-2302

The key word for eating at Towson University is "choice." There are 11 great places to eat at TU. You can dine a la carte at nine locations on campus, or at two all-you-can-eat dining halls. Traditional, unrestricted or block meal plan options are available. Call 410-704-2284 for more information.

Students who have a Dining Points account can use their onecard to receive a five percent discount on food purchased at Dining Services locations.

### **Disability Support Services**

Administration Building, 2nd Floor

410-704-2638

410-704-3475

Disability Support Services (DSS) provides services and accommodations to meet the needs of students with disabilities, including students with attention deficit/hyperactivity disorders, blindness/low vision, deafness/hard of hearing, learning disabilities, medical disabilities, physical disabilities and psychological disabilities. Students with disabilities are encouraged to call and make an appointment to register with DSS as soon as possible after admission to the university to ensure timely provision of services. Even if a student decides that services are not needed immediately, it is advisable to register with the office so that documentation is on file should the services be needed at a later time. Recent documentation from a qualified professional as to the nature of the disability is required for services, and accommodations are provided according to individual need. In addition to arrangements for accommodations, services include the provision of instructional support in the form of time management, study and test-taking strategies, and reading and writing assistance. Access to



adaptive technology, including disability-specific software and equipment, is provided as well. Students who suspect they have a disability but do not have documentation are also encouraged to contact DSS for advice on how to obtain an appropriate evaluation.

### **Dowell Health Center**

Dowell Hall

Appointments: 410-704-2466

General Information: 410-704-2467

The Dowell Health Center has an experienced staff of physicians, nurse practitioners, physician's assistants and health educators. Most services are offered at a minimal cost. These include treatment of common illness and injuries, a full range of sexual health services, anonymous HIV testing, simple lab tests and health education. Prescription birth control and medications are offered at a low cost. X-rays, outside lab and other diagnostic tests, and physician or hospital referrals are the student's financial responsibility.

For non-urgent problems, students should make an appointment by calling 410-704-2466 between the hours of 8:30 a.m. and 5 p.m. Walk-in patients will be evaluated by a trained nurse and referred to a clinician or given a follow-up appointment if needed.

The Student Health Service, located in Dowell Health Center, is open weekdays throughout the year, with the exception of the Christmas and Thanksgiving breaks, university holidays, and inter-sessions. Hours during the regular semester are Monday and Thursday, 8:30 a.m. to 6:30 p.m.; Tuesday, Wednesday, Friday, 8:30 a.m. to 4:30 p.m. Call for January and summer hours.

For after-hours emergencies, students should call the University Police, 410-704-2133, who will arrange transportation to a local emergency room. For non-emergencies after hours, the Health Center has arrangements with an urgent care center nearby to see students at their own expense. Call 410-704-2466 for this number.

Health insurance is strongly recommended to help defray the costs of services not available at the Health Center. The university of-

fers an insurance plan which provides coverage for such services at a very reasonable cost, and full coverage for most services and drugs provided by the Health Center.

All entering full-time graduate students, all graduate assistants, international graduate students, and teaching assistants must meet the university's immunizations policies prior to registration. This should be done before arrival on campus to minimize delays in registration. Immunizations are available at the Dowell Health Center for a fee. Students living in on-campus housing must be immunized against meningococcal meningitis or sign a waiver indicating they understand the risks of the disease and decline to be immunized.

### **Graduate Student Association**

Enrollment Services

410-704-3967

Fax: 410-704-4669

gsa@towson.edu

The Graduate Student Association (GSA) upholds the mission of academic excellence at Towson University and provides a vehicle for graduate students to express their needs, concerns and ideas. The GSA provides grants three times a year (November, February and May) to help defray costs for graduate students who wish to pursue research, attend a conference or give a presentation. Graduate students are encouraged to apply for these grants. The GSA represents graduate student views on various university-wide committees, and distributes a newsletter that addresses various topics specific to the graduate student. All graduate students automatically become members of the GSA, and active participation is encouraged.

### **Housing**

Graduate students may live in residence halls or apartments if space is available. Another popular and convenient residence for both single and married graduate students is the Burkshire at Towson University. These university-owned apartments range in size from one-bedroom to two-bedrooms with a

den. They are located adjacent to campus. All on-campus housing, except the Burkshire, is furnished and includes local telephone service, voice mail, call waiting, call forwarding, three-way calling, Comcast cable television programming (including HBO), MicroFridge (except apartments that have full kitchens), and Comcast cable Internet service. The Burkshire offers amenities such as washer/dryers and dishwashers. The Department of Housing and Residence Life, 410-704-2516, can provide more information about on-campus housing. For more information on the Burkshire Apartments, call 410-324-8100.

An Off-Campus Housing bulletin board in the University Union is available for use by students seeking housing, landlords who have housing to offer, or renters looking for roommates. Apartment guides and a list of rooms for rent in private homes can be obtained from the Office of Student Activities, University Union, room 217. Also, to view this information on the Web, visit [www.towson.edu/studentactivities](http://www.towson.edu/studentactivities). Another resource is the Baltimore Sun Apartment Search office, a local business providing free locator search information to renters on over 1,300 apartments in Towson and 90,000 apartments in the Baltimore area. You can reach Baltimore Sun Apartment Search at 800-874-0788 or locally at 410-292-1980.

### **Millennium Hall**

Capstone Properties  
443-275-4000

Millennium Hall is Towson University's new five-story residence building offering upper-class and graduate students housing in four-bedroom furnished apartments. Owned and operated by Capstone Properties, the building is a privatized apartment complex. Each four-bedroom apartment accommodates four students and is fully furnished with a living/dining room and full kitchen. Each bedroom has a telephone jack, cable TV, and computer connection. The building is air-conditioned and has a laundry room on the first floor.

### **International Student and Scholar Office**

Administration Building, Room 247A  
410-704-2421  
[isso@towson.edu](mailto:isso@towson.edu)  
[www.towson.edu/isso](http://www.towson.edu/isso)

The International Student and Scholar Office (ISSO) provides services and programs to international students and scholars, including researchers, guests and visiting faculty. The office offers assistance with the following: visa applications and immigration-related matters; cross-cultural orientation and adjustment; success in the U.S. academic environment, including understanding and following university regulations and using university services; connections to community resources; mediation of cross-cultural misunderstandings; and emergency situations. Advisers provide publications, information sessions, and individual appointments.

The ISSO holds an orientation program at the beginning of each semester to assist students in their initial adjustment. In addition to information on cross-cultural adjustment and communication, the program offers students opportunities to build friendships in the first week on campus. Each spring, an income tax seminar is organized to educate students about their U.S. tax responsibilities. The ISSO also publishes a newsletter and organizes other activities to foster interaction and appreciation among national/cultural groups and American students on campus.

### **Jewish Cultural Center**

Newell Hall  
410-704-4671

The Jewish student center offers a full range of social, educational, religious and cultural programs, including a Kosher dining program. The center received a grant from Hillel of Greater Baltimore through the Weinburg Foundation to complete renovations last summer. The center now has new furniture, work tables for students groups, and an eating and socializing area. Open to all Towson students, programs include weekly Shabbat dinners and social gatherings as well as discussions and lectures. The center is

available for other student groups if reservations are made in advance. Students who participate in the Kosher meal plan option at Newell Dining Hall are welcome to eat in the center.

### **Long-Distance Telephone Service**

The university's discount long-distance service, TigerTalk, is available to all students living both on- and off-campus. For more information, contact TigerTalk at 410-704-3724.

### **Office of Student Activities**

University Union, Room 217  
410-704-3307  
[www.towson.edu/studentactivities](http://www.towson.edu/studentactivities)  
Office Hours:  
Monday, 8:30 a.m.-7 p.m.  
Tuesday-Thursday, 8:30 a.m.-6 p.m.  
Friday, 8:30 a.m.-5 p.m.

The Office of Student Activities complements the mission of the university by creating involvement opportunities and environments that motivate and inspire students to become active members of the campus community. Working in collaboration with faculty and staff, Student Activities staff offer a wide array of educational, cultural, social and recreational programming that foster student learning and development. Areas of responsibility for the office include: leadership development, fraternity/sorority affairs, commuter student services, non-traditional student services, campus programming, service and volunteerism, and student organization assistance.

### **Office of Diversity Resources**

University Union, Room 232  
410-704-2051  
Office Hours:  
Monday-Thursday, 8:30 a.m.-7 p.m.  
Friday, 8:30 a.m.-4:30 p.m.

Towson University is committed to developing an environment which is conducive to the success of the multicultural, multiracial population it serves. The Office of Diversity Resources sponsors a variety of programs, including the Graduate Diversity Grant and

the Black Graduate Support Group, which provides students with information about university services, scholarships, social opportunities and access to study groups.

### **Parking**

University Union, Room 118  
410-704-2284  
<http://parking.towson.edu>

All motor vehicles, except those parked at parking meters, must display a valid parking permit when parked on campus from Monday at 6 a.m. through Friday at 3 p.m. Vehicles in violation of this regulation will be ticketed. Resident students may purchase Resident Parking Permits. Students who live off-campus may purchase Commuter Parking Permits.

All-day and evening student parking permits are available. The all-day permit offers on-campus parking anytime during the day, Monday through Friday, at a cost of \$175 for the academic year, or \$100 per semester for the 2001-2002 academic year. The evening-only permit offers parking on campus between 3 p.m. and 6 a.m., Monday through Friday, at a cost of \$60 annually or \$40 per semester for the 2001-2002 academic year. These prices are working estimates as of time of publication. Final prices are subject to change.

Visitors to campus are required to purchase a one-day Visitor Parking Permit for \$2. Those participating in Admissions Office events are excluded from this requirement. Cost subject to change without notice.

For more information or to purchase a parking permit, contact the Auxiliary Services Business Office.

### **Recreation and Fitness Facilities**

Towson Center, Burdick Hall  
Towson Center Reservation Desk,  
410-704-2370  
Burdick Hall, 410-704-2367

Recreation and fitness facilities are located at the Towson Center and Burdick Hall. The Towson Center offers a full range of fitness equipment; courts for tennis, squash, handball and racquetball; and indoor and out-



door jogging tracks. Students can check out necessary equipment by presenting a TU ID card (One Card) at the reservation desk outside the racquetball courts. Burdick Hall has a 25-yard swimming pool, a weight room, gyms and a climbing wall. Intramural playing fields are close to the facility.

The Campus Recreation Services Department offers structured intramurals, unstructured recreational activities, and sports clubs for all students, faculty, staff and alumni. The intramural program has more than 20 different sports (team and individual), including softball, flag football, volleyball and indoor soccer. Aerobic fitness sessions are offered during the fall and spring semesters.

### **Campus Recreation Services Department**

Burdick Hall, Room 150  
410-704-2367

[www.towson.edu/campusrec](http://www.towson.edu/campusrec)

The Campus Recreation Services Department is comprised of five program areas: Adventure Pursuits, Fitness/Wellness, Informal Sports, Intramural Sports, and Sport Clubs. Basic information on times of operation can be found on the Rec Check Line, 410-704-2771. You may call 410-704-2367 or 410-704-3649 to speak to a staff member about more detailed information. The department is located in Burdick Hall, room 150.

The Adventure Pursuits program offers an indoor climbing wall (Monday-Thursday, 4-9 p.m.), a wilderness orientation program (Project Marj), an outdoor equipment rental program and a free kayaking clinic on Tuesday evenings in the Burdick Hall pool. Project Marj is a weeklong optional orientation program that takes place at the end of August. It involves backpacking and rock climbing, while allowing students to make friends and find out more about the university.

The Fitness/Wellness program offers approximately 16 aerobics classes each week during the fall and spring semesters. The class schedule varies from semester to semester, but runs Sunday-Friday at various

times. The program also runs educational programs on wellness and staffs the weight room with Personal Conditioners during selected hours.

The Informal Sports program offers open recreation opportunities in the gymnasiums, 25-yard pool, weight room, beach volleyball courts, climbing wall and Burdick field. You must show a valid Towson One card for entrance and the facilities must not be in use or reserved by academic classes, intercollegiate athletics, intramural sports or club activities. Please call 410-704-2367 for the current schedule of open hours.

The Intramural Sports program offers approximately 20 sports throughout the year, including flag football, soccer, basketball, volleyball, softball, tennis, indoor lacrosse and a climbing competition. To join a team or make one of your own, please call 410-704-3649.

The Sports Clubs program is comprised of 17 student-run clubs: Badminton, Crew, Martial Arts, Mountain Biking, Men's Lacrosse, Women's Lacrosse, Outdoor Adventures Unlimited, Rock Climbing, Roller Hockey, Table Tennis, Tai Chi, Men's Ultimate Frisbee, Women's Ultimate Frisbee, Men's Volleyball, Women's Volleyball, and Wrestling. These clubs do everything from social events to intercollegiate competitions. There is no experience needed to join. For more information please call 410-704-3649.

### **Student Day Care Center**

Lida Lee Tall

410-704-2652

[childcare@towson.edu](mailto:childcare@towson.edu)

The Student Day Care Center provides childcare for children, ages 2 through 5. First priority is given to the children of university students. The center is open from 7:30 a.m. to 5:30 p.m. whenever classes are in session. Interested parents should phone or e-mail to obtain an application and information. Admittance is arranged by order of arrival on the waiting list.

Students with Children is an SGA-affiliated organization supported by the center, which



also addresses student parents whose children are not currently enrolled in the center. Such students and their families are invited to events, lectures and outings. Interested student parents are encouraged to e-mail the center to become part of a list of students who will be notified of upcoming events ([studentwithchildren@towson.edu](mailto:studentwithchildren@towson.edu)).

### Student Employment Program

The Career Center at Towson University  
Enrollment Services, Suite 332  
410-704-2233

Graduate students can explore both on and off-campus job opportunities using the resources provided by The Career Center at Towson University. On-campus jobs are posted on our password-protected Web site, in glass display cases on the 1st and 2nd floors of the University Union and in binders in The Career Center. The most recent on-campus job postings are listed on our telephone job line (updated weekly). Off-campus job listings from a wide range of local companies are posted on our Web site and in our career resource center. Most employers participating in our Student Employment Program offer flexible work hours to accommodate student schedules.

To learn more about the Student Employment Program or other services offered through The Career Center, visit our Web site, [www.towson.edu/careercenter](http://www.towson.edu/careercenter) or call 410-704-2233.

### TU Identification Card (the onecard)

<http://onecard.towson.edu>

The onecard is your key to accessing services and facilities all over campus. This card gives you access to the library, Dining Points and Retail/Vending Points debit accounts, door access to some academic labs, and your meal plan (if you purchase one). It identifies you to university officials as a Towson student with a valid reason to be on campus using university facilities.

To obtain your onecard, visit the Auxiliary Services Business Office, University Union, room 118. Bring your driver's license or an-

other form of valid, official photo identification. Your onecard is also your library card. To activate it, go to the Cook Library customer service desk.

There are two debit accounts available with your onecard.

- Dining Points accounts may be used to buy food from any on-campus dining hall or retail location. You receive a 5 percent discount by using your Dining Points account instead of cash.
- Retail/Vending Points accounts may be used for purchases at vending machines (candy and soda machines, washers and dryers), the University Store (textbooks, supplies, and convenience-store items), Copies Plus at Cook Library, Dowell Health Center, Auxiliary Services Business Office and VIP's Recreation Center.

There are no service charges to operate either account. Deposits can be made by mail, phone, in person, or through our Web site, <http://onecard.towson.edu>. Financial aid can be deposited to your onecard accounts at the Bursar's Office for faster access to your textbook funds.

To open a onecard account, complete an application form, available from:

Auxiliary Services Business Office  
University Union, Room 118  
Towson University  
8000 York Road  
Towson, MD 21252-0001  
410-704-2284

### University Store

University Union, Ground Floor  
410-704-BOOK (2665)  
<http://store.towson.edu>

In addition to textbooks, the University Store also sells beverages and snacks, clothing, stationery, Towson University emblem-wear and gift items, general reading materials, software, and school, art and computer supplies. Services include dry cleaning, gift wrapping, fax, copy and film developing.

## University Union

Information Desk

410-704-4636

(Building hours vary)

As the social hub of the campus, the University Union hosts a wide variety of activities and events throughout the day and evening. Services located in the Union include the University Store, source of textbooks, course supplies, Towson University apparel and gifts, and a variety of packaged foods and beverages; a Ticketmaster outlet; VIP's ("Very Important People-Students"), an extensive recreation and activities center; the offices of Auxiliary Services, which operates campus parking, the dining halls, and numerous other services at the university; three automatic-teller machines (ATMs); a full-service U.S. Post Office; several dining facilities; a gourmet coffee and desert bar; meeting rooms; and a large lounge. The offices of the Campus Activities Board (CAB), which presents a wide variety of programs for the campus at large; *The Towerlight*, the student newspaper; and many other organizations also are housed in the University Union.

## Women's Center

University Union, Room 311

410-704-2666

Office Hours:

Monday-Friday, 8:30 a.m.- 5 p.m.

The Women's Center offers a variety of activities and services to men and women students throughout the academic year, including a referral service for professionals in law, medicine, mental health, and other areas. The center also administers the Charlotte W. Newcombe Foundation Scholarship for women 25 years of age and over. The deadline for applications is in April. Recently relocated to the University Union, the center is also used for study, conversation, eating and relaxation.



## Course Descriptions

Descriptions of 500-800-level courses are listed in this section. Consult the course schedules to determine the courses offered in a particular session. Consecutively numbered courses, when separated by a hyphen, are to be taken in sequence.

### ACCOUNTING (ACCT)

**ACCT 601 FINANCIAL ACCOUNTING FOR NON-ACCOUNTANTS (3)** Basic postulates, principles and assumptions of financial accounting. Includes review of GAAP, external reporting and nonprofit accounting. Prerequisite: A non-accounting degree and admission to the graduate program or permission of the chairperson of the Department of Accounting.

**ACCT 630 FINANCIAL ACCOUNTING ISSUES (3)** Theoretical foundations of generally accepted accounting principles and how they influence practice. Basic postulates, assumptions and standards that underlie measurement criteria and practices of financial accounting. Prerequisite: Undergraduate degree in accounting and admission into MACC.

**ACCT 640 CONTEMPORARY AUDITING ISSUES (3)** This course focuses on the application of generally accepted auditing standards and procedures to a myriad of contemporary auditing issues. Contemporary issues such as auditor independence, professionalism, ethical dilemmas, analytical procedures, internal control, high-risk clients, earnings manipulation and unique client transactions are addressed in a case format. Cases address actual, not contrived, situations. Prerequisite: Undergraduate degree in accounting and admission into MACC program.

**ACCT 650 MANAGERIAL COST ACCOUNTING (3)** This course applies theoretical knowledge to practical applications. Utilizing the case study approach, this course

examines both the conventional, and more recent, advanced cost systems, such as activity-based costing, in many different environments. Through the analysis of the problems associated with identifying cost drivers, the determination of the allocation of costs, and the transfer of costs, students will gain an appreciation of the importance and the spectrum of cost-accounting information in the managerial decision-making process. Prerequisite: Undergraduate degree in accounting and admission into MACC program.

**ACCT 701 MANAGERIAL ACCOUNTING FOR NON-ACCOUNTANTS (3)** Principles and techniques underlying managerial accounting. Techniques of standard costing and principles of valuation applicable to internal use of accounting information. Prerequisite: ACCT 601, admission to the graduate program or permission of the Department of Accounting chairperson.

**ACCT 740 FORENSIC ACCOUNTING (3)** Forensic accounting is an interdisciplinary study of social learning/process theories accounting, law, the systems of internal controls, evidence gathering, interpersonal skills, communication skills and information technology skills. This course provides foundation knowledge about fraud prevention, detection and investigation for an accountant. Prerequisite: ACCT 640 or consent of instructor.

### ADULT EDUCATION (ADED)

**ADED 585 ADULT EDUCATION (3)** Introduction to the historical and philosophical

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evolution of adult education in the United States in relationship to current aims, types of programs and issues. Prerequisite: Consent of instructor.

**ADED 587 TEACHING THE ADULT LEARNER (3)** Teaching-learning activities at various levels of adult education. The needs, motivation and abilities of the adult learner are stressed. Prerequisite: Consent of instructor.

### ANTHROPOLOGY (ANTH)

**ANTH 501 ANTHROPOLOGICAL THEORY (3)** Survey of the theoretical contribution made by American, British and Continental anthropologists. Prerequisite: ANTH 207 plus 9 hours of anthropology.

**ANTH 521 GENDER IN CROSS-CULTURAL PERSPECTIVE (3)** Materials from a variety of cultures will be used to illustrate and analyze the roles of women and men within the major institutional aspects - the family, economics, politics and religion. Particular attention will be devoted to the similarities and differences in sex-role patterns within and among the cultures. Prerequisite: SOCI 101 or ANTH 207.

**ANTH 530-539 TOPICS IN ANTHROPOLOGY (3)** Examination of current topics in anthropology, designed for non-majors as well as majors. May be repeated for credit provided a different topic is covered. Prerequisite: ANTH 207.

**ANTH 546 WEALTH, POWER AND POLITICS IN CROSS-CULTURAL PERSPECTIVE (3)** Political systems and the distribution of power in egalitarian, ranked and stratified societies will be examined. Prerequisite: SOCI 101 or ANTH 207.

**ANTH 553 LATINAS IN THE AMERICAS (3)** Anthropological perspective stressing "emic" or insider view, structural constraints of class, gender and race; women's agency is used to understand the diverse experiences of

Latin American women with colonization, independence, revolution, development and structural re-adjustment. Prerequisite: ANTH 207 or 208 or WMST 231 or consent of instructor.

**ANTH 564 RELIGION, MAGIC AND WITCHCRAFT (3)** The world view, beliefs and rituals of selected nonliterate peoples considered with reference to religion as a universal category of human culture. Prerequisite: ANTH 207.

**ANTH 565 NORTH AMERICAN INDIANS (3)** The traditional culture of native North Americans and their sociocultural place in modern American society. Prerequisite: ANTH 207.

**ANTH 566 SOUTH AMERICAN INDIANS (3)** Survey of the cultures of the native peoples of South America in pre-Columbian times and the situation of contemporary tribal peoples of South America. Prerequisite: ANTH 207.

**ANTH 567 PEOPLES OF THE MIDDLE EAST (3)** Survey of the Middle East as a cultural area with emphasis on culture change. Prerequisite: ANTH 207.

**ANTH 568 DEVELOPMENT AND INDUSTRIALIZATION IN CROSS-CULTURAL PERSPECTIVE (3)** The development and industrialization experiences of selected contemporary populations in Asia, Africa and Latin America in comparison with those of developed countries. Prerequisite: ANTH 207 or SOCI 101.

**ANTH 569 TRADITION AND REVOLUTION IN LATIN AMERICAN SOCIETY (3)** An anthropological perspective will be brought to bear on contemporary Latin American culture and society. The pre-Columbian heritage, the traditional synthesis and the struggle to modernize and develop will be examined. Prerequisite: SOCI 101, ANTH 207 or ANTH 208.



**ANTH 570-579 SPECIAL TOPICS IN ANTHROPOLOGY (1-3)** Examination of current topics in anthropology at the most specialized level. May be repeated for a credit provided a different topic is covered. Prerequisite: ANTH 207 and 6 additional credits of anthropology.

**ANTH 581 ARCHAEOLOGICAL METHODS AND THEORY (3)** Methods of excavating and recording archaeological data. Investigation of problems of current research interest. Prerequisite: ANTH 207.

**ANTH 587 NATIVE AMERICAN ARCHAEOASTRONOMY (3)** Prehistoric roots of astronomy in the New World, with an emphasis on the American Southwest. Celestial motions and the development of a calendar, related folklore and case studies concerning solstice and equinox observations. Prerequisite: ANTH 207 or 208.

**ANTH 588 PEASANT CULTURES (3)** Focus on rural agricultural population of modern states, their traditional lifeways and the changes being wrought by modernization. Prerequisite: SOCI 101 or ANTH 207.

**ANTH 591-592 INTERNSHIP IN ANTHROPOLOGY I, II (3, 3)** Supervised experience in work setting which facilitates understanding of rules and relationships relevant to anthropological inquiry and application of anthropological knowledge. While opportunities to do anthropologically oriented fieldwork in the community will usually be available, placement in agencies dedicated to anthropological inquiry may not always be possible. Students may elect to take one semester for 3 credits (591) or two semesters for 3 credits each (591-592), in one agency for both semesters or in a different agency each semester. No more than 3 credits may be earned in a semester, without consent of the chair, which will be granted only when agency requirements and student needs make it appropriate. Prerequisite: Consent of internship coordinator.

**ANTH 595 INDEPENDENT RESEARCH (3)** Supervised research and anthropological investigation leading to preparation of a research project or a supervised field experience. Prerequisite: At least 12 credits in ANTH and consent of department chair.

## APPLIED INFORMATION TECHNOLOGY (AIT)

**AIT 500 FUNDAMENTALS OF COMPUTER PROGRAMMING AND DATA STRUCTURES (6)** Structured problem solving, algorithm development, fundamentals of computer programming, basic data structures and their implementation, sort and search algorithms, and an introduction to the design and development of information systems.

**AIT 600 INFORMATION TECHNOLOGY INFRASTRUCTURE (3)** A discussion of information systems architectures including software systems, hardware, operating systems, data bases, object-oriented technology, networking and enterprise-wide systems.

**AIT 610 SYSTEMS DEVELOPMENT PROCESS (3)** Structured and object-oriented analysis, design and implementation of information systems; distributed information systems; information systems life cycle models, platforms and security. Discussions of requirements definition, modeling quality assurance and development environments.

**AIT 612 INFORMATION SYSTEMS VULNERABILITY AND RISK ANALYSIS (3)** The identification of vulnerabilities and risks inherent in the operation of information systems will be explored. Countermeasures will be discussed and documented in an effort to counter identified vulnerabilities. Prerequisite: AIT 600; Co-requisite: AIT 610.

**AIT 614 NETWORK SECURITY (3)** Network security, hacker attacks, web security, e-mail security, e-commerce security, systems

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and operation environment security, database security, algorithms for making data communications secure, encryption and coding techniques and IP security. Prerequisite: AIT 612.

### **AIT 616 FUNDAMENTALS OF WEB TECHNOLOGIES AND DEVELOPMENT**

(3) Introduction to HTTP protocol, dynamic HTML and common gateway interface (CGI) programming. Study and practice of object-oriented programming concept using Java. Design and implementation of application software including graphical user interfaces (GUIs), concurrent and distributed programming, distributed information systems server architectures, database connectivity and the enterprise packages provided by the Java programming language. Prerequisite: AIT 600.

### **AIT 618 CLIENT/SERVER-SIDE PROGRAMMING ON THE WEB**

(3) Discussion of HTTP protocol, dynamic HTML, common gateway interface (CGI) programming, Java applets and server-side programming. Development of information systems incorporating applications executing on a client-server system. Design and implementation of distributed information systems involving the technologies developed for the Web. Prerequisite: AIT 616.

### **AIT 624 SOFTWARE ENGINEERING FUNDAMENTALS**

(3) Application of formal software engineering principles and practices to the development of information systems, application software and embedded, computer-based systems. A comprehensive description of the software engineering process will be presented along with a discussion of the approaches, methodologies and tools available to the practicing software engineer. Prerequisite: AIT 610.

### **AIT 626 ADVANCED TOPICS IN SOFTWARE ENGINEERING**

(3) Formal processes leading to developing information system design requirements and specifications; quantitative measures of software attributes including: software cost and schedule estimation, human factors, test and integration, re-

liability, real-time software, quality assurance and their contributions to a successful software development cycle. Prerequisite: AIT 624.

### **AIT 632 DATABASE MANAGEMENT SYSTEMS**

(3) Study of database management system fundamentals, data models, design, implementation and processing. Most popular database management systems such as Oracle, SQL Server and Access are used throughout the course to illustrate design and implementation of real world database applications and processing. Prerequisites: AIT 500 and 600.

### **AIT 670-679 SPECIAL TOPICS IN APPLIED INFORMATION TECHNOLOGY**

(3) Selected topics in applied information technology. Emphasis on new and emerging applications in information technology. Prerequisites: 6 credits of graduate work in AIT and consent of instructor.

### **AIT 695 INDEPENDENT STUDY IN APPLIED INFORMATION TECHNOLOGY**

(3) Independent supervised study in selected areas of information technology and its application in a variety of fields. Prerequisite: 6 credits of graduate work in AIT and consent of instructor.

### **AIT 710 CASE STUDIES IN INFORMATION SECURITY**

(3) This course consists of a real-world project dealing with information security in distributed information systems including applications of theory and techniques in information security. Prerequisites: AIT 612 and AIT 614.

### **AIT 715 CASE STUDIES IN INTERNET APPLICATIONS**

(3) Real-world project dealing with the development of information systems for Internet applications; emphasis on distributed information systems for Web deployment. Prerequisites: AIT 616 and AIT 618.

### **AIT 725 CASE STUDIES IN SOFTWARE ENGINEERING**

(3) Real-world project dealing with design and development of

large-scale information systems including applications of theory and techniques in software engineering. Prerequisites: AIT 624 and 626.

**AIT 732 ADVANCED DATABASE MANAGEMENT SYSTEMS (3)** This course emphasizes advanced topics in database management systems. Topics include: query transaction processing, concurrency and recovery techniques, advanced database models, object-oriented databases, relational databases and Web databases, distributed databases, data warehousing and OLAP. Prerequisite: AIT 632.

## ART (ART AND ARED)

**ART 500 CERAMIC RAW MATERIALS (3)** Lecture and laboratory investigation of ceramic materials as they apply to glazes, clay slips and clay bodies. Tests and problems in ceramic raw materials. Prerequisite: ART 309, ART 310 or equivalent.

**ART 508 CERAMICS: SCULPTURE (3)** Studio experience using a variety of ceramic techniques. Problems in sculptural directions for students' experiences in handbuilding and the potter's wheel. Prerequisite: ART 310 or consent of instructor.

**ART 513 ENAMELING II (3)** Continued studio experience in enameling with emphasis on advanced techniques of cloisonne and plique-a-jour. Independent work and personal expression are encouraged. Taught concurrently with ART 314. Prerequisite: ART 314.

**ART 514/515/516 ADVANCED STUDIO (2-3, 2-3, 2-3)** Independent work for advanced students in field of special interest. Prerequisite: Must have exhausted other courses in particular field or obtained written consent of instructor. Student must make arrangements in advance of registration with instructor of choice.

**ART 518 JEWELRY II (3)** Intermediate design and studio experience. Directed problems in the techniques of metal construction, forging, stone setting and cold joinery. Prerequisite: ART 318.

**ART 519 METALSMITHING (3)** Lecture, demonstration and directed studio problems in raising, forging, joining and finishing various metals with emphasis on design and creation of hollowware and flatware. The historic and aesthetic aspects of the media are considered. Prerequisite ART 318.

**ART 521 GRAPHIC DESIGN II (3)** Continued studio in drawing, painting and typography. Advanced assignments in preparing brochures and booklets for commercial printing. Prerequisite: ART 225 or consent of instructor.

**ART 528 WEAVING II (3)** Continued studio experience in weaving. Further investigation into a variety of weaves on various warp threadings with experimentation in color, fiber and woven forms. Prerequisite: ART 328.

**ART 529 PAINTING IV (3)** Continued studio experience for advanced students, with emphasis on personal direction. May be repeated for a maximum of 9 total credits. Prerequisite: ART 336.

**ART 530 WATERCOLOR II (3)** Intermediate studio experience: landscape, still life, figures and photographic imagery. Prerequisites: ART 331 and Watercolor I.

**ART 534 PHOTOGRAPHY II (3)** Aesthetic of black and white photography using advanced photographic processes and electronic imaging techniques. Prerequisite: ART 234; may be taken concurrently with ART 321.

**ART 535 COLOR PHOTOGRAPHY III (3)** Aesthetic of color photography using advanced color photographic processes, alternative media processes and electronic imag-



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ing techniques. Prerequisite: ART 234; may be taken concurrently with ART 321.

**ART 536 PHOTOGRAPHY IV (3)** Advanced research into the aesthetic of photographic imaging through the use of black and white and color photo processes, alternative media processes and electronic imaging technology. Prerequisites: ART 334, ART 335, ART 421; may be taken concurrently with ART 421.

**ART 539 METAL SCULPTURE II (3)** Continued lecture and directed studio problems in direct or cast metal sculpture. Prerequisite: ART 339.

**ART 540 SCULPTURE: MODELING STUDIO III (3)** Continued studio experience in modeling with the opportunity for advanced students to develop interest in specialized areas. Prerequisite: ART 340.

**ART 542 SCULPTURE: CARVING STUDIO III (3)** Continued studio experience in carving; individually selected studio problems in area of special interest. Prerequisite: ART 342.

**ART 543 COMPUTER MULTIMEDIA I (3)** Exploration of multimedia and authoring techniques as related to interactivity on the computer, using still and animated image creation and manipulation. Prerequisite: ART 321 or ART 360.

**ART 547 SCREEN PROCESS II (3)** Advanced color projects, using direct photo emulsion, and emphasizing integration of hand-drawn image with photo- and computer-generated images. Non-toxic water-based inks.

**ART 549 RELIEF PROCESS II (3)** Traditional and experimental processes. Advanced color assignments using oil and water-based inks.

**ART 550 INTAGLIO PROCESS II (3)** Multiple-plate color and simultaneous color/in-

taglio/relief techniques. Further investigation into collograph using experimental materials. Prerequisite: ART 449 or consent of instructor.

**ART 553 LITHOGRAPHIC PROCESS II (3)** Personal expression; advanced printing including stone plate and photo plate. Multiple-color printing. Prerequisite: ART 451 or consent of instructor.

**ART 555 NEW DIRECTIONS IN PRINT-MAKING (3)** Using technology to link print-making to digital, photo and Xerox images. Prerequisite: ART 217.

**ART 557 GRAPHIC DESIGN III (3)** Problems in graphic communication on the Macintosh computer, emphasizing individual portfolio development. Prerequisite: ART 417.

**ART 561 INTRODUCTION TO ART THERAPY I (3)** A survey of the concepts and procedures of creative expression in the service of personal understanding and development. Consideration of educational, rehabilitative and psychiatric settings. Lectures, discussions, workshops and readings. Prerequisite: At least junior standing as a major in art, psychology, health, mental health or associated fields. Approved work experience in one of the above fields may be substituted (offered evening only).

**ART 562 INTRODUCTION TO ART THERAPY II (3)** Continuation of Art Therapy I, the work of the therapist. Case studies, observations and participation in a variety of settings. Discussion, fieldwork and readings. Prerequisite: ART 461 or consent of instructor (offered spring semester, evening only).

**ART 573 ILLUSTRATION II (3)** Continued studio experience in illustration and development of personal approaches in various media. Emphasis on practicing professional assignments and preparing portfolio. Prerequisite: ART 373 or equivalent.



**ART 578 NEW DIRECTIONS IN PAINTING, EXPERIMENTAL MEDIA AND ART I**

(3) Continued studio experience: for advanced student with emphasis on personal direction. Prerequisite: Permission of instructor.

**ART 594 TRAVEL AND STUDY ABROAD**

(3-6) Countries and topics to be selected by the department and instructors sponsoring the program. For information, contact the art department early in the semester preceding the semester of travel study. Prerequisite: Consent of instructor and interview.

**ART 608 GRADUATE CERAMICS I (3)**

Advanced problems in selected ceramic areas. Repeatable for a maximum of 6 credits with consent of program director and instructor.

**ART 611 GRADUATE DRAWING I (3)**

Studio problems in expressive drawing. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 211 or consent of instructor.

**ART 614/615/616 GRADUATE STUDIO**

(2-3, 2-3, 2-3) Independent work for graduate students in field of special interest. Prerequisite: All courses in field completed and written consent of instructor.

**ART 618 GRADUATE JEWELRY I (3)**

Studio problems in shell construction, stone setting and mechanical joinery. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 418 or consent of instructor.

**ART 620 GRADUATE GRAPHIC DESIGN**

**I: TYPOGRAPHY (3)** Studio problems in selected typeface areas. Computerized fonts, classics to exotic, will be compared. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 317 or consent of instructor.

**ART 622 GRADUATE EXHIBITION DESIGN**

(3) Theory, concepts, planning, management, design and installation of art ex-

hibits. Application for professional artists. Prerequisite: Graduate standing.

**ART 626 GRADUATE FABRIC DESIGN:**

**DYEING (3)** Studio problems in batik, katazome, shhibori, plangi, tie-dye, stencil and the direct application of dye on fabric. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 326.

**ART 627 GRADUATE FABRIC DESIGN:**

**PRINTING (3)** Studio problems in screen printing and/or block printing. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 326.

**ART 629 GRADUATE PAINTING I (3)**

Studio problems in painting: current trends, museum visits and lectures. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 229 or equivalent.

**ART 630 WATERCOLOR (3)**

Trends and outstanding painters and styles. Studio work, museum visits and lectures. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 331 or consent of instructor.

**ART 632 GRADUATE COMPUTER ART**

(3) Advanced knowledge and aesthetic insight through computer art production. Lectures, demonstrations, gallery visits and studio work in art department lab. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: Consent of instructor.

**ART 633 GRADUATE CERAMICS: SPECIAL PROCESSES (3)**

In-depth exploration of techniques including moldmaking, casting, the use of engobes, clay bodies, lusters and decals. Minimester only.

**ART 634 GRADUATE PHOTOGRAPHY I**

(3) Studio problems emphasizing personal investigation of the photographic medium as an art form. Repeatable for a maximum of 6

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credits with consent of program director and instructor. Prerequisite: ART 334 and consent of instructor.

**ART 635 GRADUATE EXPERIMENTAL DIRECTIONS (3)** Conceptual, installation and performance art; studio projects. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: Consent of instructor.

**ART 640 GRADUATE SCULPTURE I (3)** Studio problems in selected sculptural areas. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 340, ART 241, ART 339, ART 342, or any 400-level course; or consent of instructor.

**ART 641 MULTIMEDIA CONCEPT AND THEORY (3)** Advanced study of multimedia concept, theory and aesthetics including research and studio application. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: Consent of professor.

**ART 650 GRADUATE INTAGLIO, RELIEF I (3)** Studio problems in intaglio and/or relief processes, including mixed media. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 349, ART 449 or equivalent.

**ART 653 GRAPHICS: LITHOGRAPHY, SERIGRAPHY (3)** Studio work for artists with knowledge of lithography and/or serigraphy. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 347, or ART 450 or equivalent.

**ART 673 GRADUATE ILLUSTRATION I (3)** Studio problems in the concepts and techniques of objectives rendering, expressive painting and sequential imagery. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 473 or consent of instructor.

**ART 678 NEW DIRECTIONS IN PAINTING, EXPERIMENTAL MEDIA AND ART II (3)** Continued studio experience: for advanced student with emphasis on personal direction. Prerequisite: Permission of instructor.

**ART 694 GRADUATE TRAVEL STUDY (3-6)** Global experiences in art. Selected graduate-level research and studio problems in area of special interest. Location and topics to be announced one year prior to travel experience. Course may be repeated. Prerequisite: TU graduate school acceptance interview and consent of instructor.

**ART 708 GRADUATE CERAMIC II (3)** Studio problems in selected ceramic areas. Prerequisite: ART 608.

**ART 711 GRADUATE DRAWING II (3)** Studio problems in selected drawing areas: awareness, imagination and craftsmanship. Prerequisite: ART 611.

**ART 715 M.F.A. STUDIO I (3)** Independent problems in art. May be repeated for additional credit with art adviser consent. Prerequisite: M.F.A. status and written consent of art adviser.

**ART 718 GRADUATE JEWELRY II (3)** Studio problems in advanced shell construction and surface embellishment. Prerequisite: ART 618.

**ART 720 GRADUATE GRAPHIC DESIGN II: PORTFOLIO (3)** Studio problems in professional portfolio presentation. Prerequisite: ART 620 or consent of instructor.

**ART 729 GRADUATE PAINTING II (3)** Studio problems in selected painting areas: watercolor, oil and other media. Prerequisite: ART 629.

**ART 731 GRADUATE CERAMICS III (3)** Studio problems in selected ceramic areas. Prerequisite: ART 708.

**ART 734 GRADUATE PHOTOGRAPHY II (3)** Studio problems in selected areas of photography with an emphasis on personal investigation of mixed media. Prerequisite: ART 634.

**ART 740 GRADUATE SCULPTURE II (3)** Studio problems in selected sculptural areas. Prerequisite: ART 640 or consent of instructor.

**ART 750 GRADUATE INTAGLIO, RELIEF II (3)** Studio problems in selected printmaking areas: etching, drypoint, aquatint, photo engraving, embossing, collographs, woodcuts, linecuts, wood engraving and subtractive relief. Prerequisite: ART 650.

**ART 781 GRADUATE ILLUSTRATION II (3)** Studio problems in location drawing, figure and costume, experimental media, manuscript interpretation and portfolio analysis. Prerequisite: ART 673.

**ART 783 M.F.A. SEMINAR (3)** Lectures and discussions on the contemporary art scene, aesthetics and art concepts. Oral and written presentations, gallery/museum/studio visits included. Prerequisite: M.F.A. candidate.

**ART 784 SEMINAR ON COLLEGE-LEVEL TEACHING (3)** Organization and management of studio art classes: critiquing skills, creation and presentation of assignments, developing outlines and grading. Prerequisite: Second-year M.F.A. graduate students and M.Ed. graduate students with departmental consent.

**ART 785 M.F.A. STUDIO II (3)** Independent problems in art with special emphasis on preparation for M.F.A. project. Prerequisite: Must be taken concurrently with ART 896 M.F.A. project.

**ART 795 DIRECTED READING IN ART (3)** Extensive reading in an aspect of art. Prerequisite: Graduate standing and consent of art adviser.

**ART 896 M.F.A. PROJECT (6)** Preparation and installation of selected art works in an exhibition format as a final review for the M.F.A. degree. A written supportive paper defining the scope and philosophy of the work. Prerequisite: To be taken concurrently with ART 785 during final semester of the program.

**ART 897 GRADUATE PROJECT IN ART (3)** Exhibition of project plus a paper defining the project's scope and philosophy. Prerequisite: Consent of department chairperson.

**ART 898 THESIS (6)** Original investigation in art, art education, art history or other approved area. Prerequisite: ARED 797.

**ART 899 THESIS CONTINUUM (1)**

## ART EDUCATION (ARED)

**ARED 571 ADVANCED ART EDUCATION (3)** Art education problems at all levels; materials and skills in relation to classroom needs. Prerequisite: ARED 371 or equivalent.

**ARED 609 MULTICULTURAL ART EDUCATION (3)** The study of multicultural art. Includes investigation of cultural contexts, studio processes and teaching strategies in grades K-12. Repeatable for a maximum of 6 credits.

**ARED 797 SEMINAR IN ART EDUCATION (3)** Investigation of problems and theories in art education and related fields. Prerequisite: Consent of instructor.

**ARED 798 ART EDUCATION THESIS PROJECT I (3)** Introduction to art education thesis project. Includes the writing of a proposal, outline of project and research in selected area. Repeatable for 1-3 additional credits with consent of program director and instructor. Prerequisite: ARED 797.

**ARED 799 ART EDUCATION THESIS PROJECT II (3)** Continuation of the writing of the art education project. Includes implementation, analysis and evaluation of study. Prerequisite: ARED 798.

## ART HISTORY (ARTH)

**ARTH 500 STUDY ABROAD (1-6)** Travel and study abroad; various topics in the history of art. Prerequisite: GPA of 3.25.

**ARTH 585 SEMINAR IN ART HISTORY (3)** Intensive analysis of a single artist or a defined historical period for a stylistic development. Directed reading in both period and contemporary sources. Discussions and museum tours; variety in content each semester. Prerequisite: ARTH 222 and one upper-division art history course or consent of instructor.

**ARTH 595 INDEPENDENT STUDY IN ART HISTORY (3)** Advanced research and examination of a topic in art history. Prerequisite: Art Survey I, Survey II and at least one 300-level art history course.

**ARTH 596 INDEPENDENT STUDY IN ART HISTORY (3)** Advanced research and examination of a topic in art history. Prerequisites: Art Survey I, Survey II and at least one 300-level art history course.

**ARTH 597 INDEPENDENT STUDY IN ART HISTORY (3)** Advanced research and examination of a topic in art history. Prerequisites: Art Survey I, Survey II and at least one 300-level art history course.

**ARTH 600 STUDY ABROAD (1-6)** Travel and study abroad; various topics in the history of art. Prerequisite: GPA of 3.25.

**ARTH 681 SEMINAR IN ART HISTORY (3)** Research on an architect, artist or historical movement. Course may be repeated. Prerequisite: Graduate standing.

**ARTH 770-779 SPECIAL TOPICS: ART HISTORY (3)** Selected topics designed for independent research in art. Prerequisite: Graduate standing and consent of art adviser.

**ARTH 795 DIRECTED READINGS IN ART HISTORY (3)** Extensive reading on a period, development or aspect of art. Prerequisite: Consent of instructor.

## AUDIOLOGY COMMUNICATION SCIENCE DISORDERS (ACSD)

**ACSD 601 AUDIOLOGY OBSERVATION (1)** Observation of audiology diagnostics and treatment in a variety of settings.

**ACSD 603 NEUROANATOMY AND PHYSIOLOGY OF THE AUDITORY AND VESTIBULAR SYSTEMS (3)** Neurological structure and function of the peripheral and central auditory systems and the vestibular system. Prerequisite: BIOL 110 and/or consent of the department.

**ACSD 611 ACOUSTICS (2)** Physical properties of sound frequency, intensity, phase, acoustics of speech.

**ACSD 621 AUDITORY DIAGNOSTICS I (3)** Administration and interpretation of audiometric procedures for differential diagnosis of auditory pathology. Prerequisites: SPPA 321 and/or consent of department.

**ACSD 645 ADULT AURAL REHABILITATION AND GERONTOLOGY (3)** Audiologist's role in the rehabilitation of adults with hearing loss.

**ACSD 655 HEARING AIDS I : SELECTION, VERIFICATION AND VALIDATION OF AMPLIFICATION (3)** Theoretical foundation and clinical application of amplification process in selection and fitting of hearing aids. Prerequisite: Graduate standing and/or consent of department.



**ACSD 721 AUDITORY DIAGNOSTICS II (3)** Differential diagnosis of auditory pathology based on audiological test battery. The development of appropriate recommendations and patient management. Prerequisite: ACSD 621 and/or consent of department.

**ACSD 731 CALIBRATION AND INSTRUMENTATION (3)** Electracoustic calibration of the Speech-Language-Hearing Clinic's audiology equipment using ANSI standards. Prerequisite: ACSD 611.

**ACSD 743 ELECTROPHYSIOLOGIC EVALUATION OF THE AUDITORY AND VESTIBULAR SYSTEMS (4)** Electrophysiologic test procedures used in different diagnosis of auditory and vestibular disorders. Prerequisite: ACSD 603.

**ACSD 751 HEARING CONSERVATION (2)** Auditory and non-auditory effects of noise exposure, instrumentation and sound measurement; the audiologist's role in implementing hearing conservation programs.

**ACSD 753 PEDIATRIC AUDIOLOGY AND REHABILITATION (4)** Principles and techniques for evaluation of hearing in children and role of audiologists in facilitating medical management, hearing aid selection, classroom acoustics and educational management. Prerequisite: ACSD 721.

**ACSD 755 HEARING AIDS II: HEARING AID MODIFICATION LAB (3)** Amplification system and modification methodologies used to enhance hearing aid performance. Analysis of special purpose circuits, digital and analog.

**ACSD 843 VESTIBULAR REHABILITATION AND TINNITUS MANAGEMENT (2)** Treatment of balance and related auditory disorders, including tinnitus. Prerequisite: ACSD 743.

**ACSD 853 COCHLEAR IMPLANT (3)** Audiologic, surgical, educational, communication and rehabilitation aspects of cochlear

implantation. Prerequisite: ACSD 753 and/or consent of instructor.

**ACSD 855 HEARING AIDS III: SEMINAR IN ADVANCED AMPLIFICATION (3)** Advanced signal processing schemes. Non-traditional amplification options and provision of real-world hearing aid fitting experience. Prerequisite: ACSD 655 and/or consent of department.

**ACSD 998 AUDIOLOGY RESIDENCY (9)** Capstone audiological clinical experience. Identification, assessment and treatment of auditory disorders. Prerequisite: Consent of department.

## BIOLOGY (BIOL)

**BIOL 502 GENERAL ECOLOGY (4)** Effects of the abiotic and biotic environment on distribution and abundance of organisms; organization of biological communities, ecosystems, evolution of different reproductive strategies and application of ecological principles to natural resource conservation. Several day-long trips required. Prerequisites: BIOL 205 and/or BIOL 207 or equivalents.

**BIOL 503 ADVANCED GENETICS (3)** Emphasis on the molecular basis of gene action. Discussion of current work and methods related to the problem of gene structure, function and mutation including the translation and regulation of genetic information. Prerequisite: BIOL 309 or BIOL 401/501 or the equivalent.

**BIOL 505 ELECTRON MICROSCOPY (4)** Theory, preparation and application of the electron microscope, including light microscopy. Average of 3 laboratory hours per week. Prerequisite: Consent of instructor.

**BIOL 506 LIMNOLOGY (4)** Physical, chemical and biological factors that affect fresh-water organisms, and some of the standard methods used to analyze these factors. Average of 3 laboratory hours per week. Prerequisites: BIOL 205, BIOL 207 or equivalent.

lents; BIOL 402/502 or equivalent recommended.

**BIOL 507 INTRODUCTION TO PALEONTOLOGY (4)** Examination of major forms of life with an emphasis on appearances, diversification and extinction during different geologic periods.

**BIOL 508 CELL BIOLOGY (4)** The molecular and morphological organization of the cell in relationship to cellular activities with emphasis on eukaryotic cells. Average of 3 hours of laboratory or discussion per week. Prerequisites: BIOL 207 or BIOL 214; CHEM 330 or CHEM 331 or equivalents.

**BIOL 509 LIFE SCIENCES (3)** Living organisms in the environment, emphasizing modes of scientific inquiry and the utilization of living organisms in the classroom. For students pursuing a certificate to teach elementary education; does not count towards M.S. degree in biology. Prerequisite: BIOL 110 or equivalent. Special permit required from elementary education department.

**BIOL 510 ENVIRONMENTAL CONSERVATION (4)** Conservation practices and problems. Soil, water, forest and wildlife resources with emphasis on interrelationships. Specialists in various phases of local, state and federal conservation work conduct or assist in numerous field trips. Average of 3 laboratory hours per week.

**BIOL 511 WILDLIFE BIOLOGY (4)** Important wildlife species with emphasis on aspects of research and management. Specific techniques and problems are studied in the field. Average of 3 hours per week in laboratory and fieldwork. Prerequisite: BIOL 207.

**BIOL 513 EVOLUTION (3)** Concepts of biological evolution, the history of the development of these concepts and current topics in evolutionary biology. Prerequisites: BIOL 205 or BIOL 207 or equivalents.

**BIOL 515 MEDICAL MICROBIOLOGY (4)** Pathogenesis of bacterial, viral, rickettsial and fungal diseases with emphasis on medically important bacteria and microbiological techniques. Recommended for students pursuing a career in medical sciences. Either this course or BIOL 518, but not both, may count toward an M.S. degree in biology.

**BIOL 518 MICROBIOLOGY (4)** Biology of microorganisms with emphasis on bacteria. Microbial morphology, physiology and genetics and the role of microorganisms in natural processes and disease. Laboratory includes methods of observing, isolating and identifying bacteria. Average of 3 laboratory hours per week. Prerequisite: CHEM 330 or CHEM 331/531, may be taken concurrently. Either this course or BIOL 515, but not both, may count toward an M.S. degree in biology.

**BIOL 521 IMMUNOLOGY (4)** Fundamental principles of immunology with emphasis on the nature of antibodies and antigens, blood groups, antibody-antigen reactions, hypersensitivity, autoimmunization, tumor immunology, artificial grafting and the preparation of vaccines. Prerequisite: BIOL 315/515 or 318/518.

**BIOL 525 DISSECTION OF THE UPPER EXTREMITY (2)** Gross anatomical dissection of the human upper extremity including the muscles, nerves and blood vessels which supply the appendage. Special emphasis will be placed on development of techniques which assure careful and accurate dissection. Will be offered only in the Minimester. Prerequisite: BIOL 213 or equivalent, and consent of instructor.

**BIOL 528 VIROLOGY (3)** Pathogenesis, morphology and life cycles of bacterial, animal and/or plant viruses. Emphasis will be on animal viruses causing disease in humans. Prerequisites: BIOL 315/515 or BIOL 318/518 or the equivalent.

**BIOL 530 HORTICULTURE (4)** Plant culture and application to developing desirable planting on home grounds or in public places with examples of appropriate types of plants for specific situations. An average of 3 laboratory hours per week. Prerequisites: BIOL 205 or equivalent.

**BIOL 531 PLANT MORPHOLOGY (4)** A survey of the plant kingdom with emphasis on evolutionary relationships, morphology, and life histories as affected by environmental conditions. A Saturday field trip may be required. Average of 3 laboratory hours per week. Prerequisites: BIOL 205 or equivalent.

**BIOL 532 VASCULAR PLANT TAXONOMY (4)** A study of the history and principles of vascular plant systematics with laboratory time devoted to collection and identification of plants in the local flora. An average of 3 laboratory hours per week. Prerequisite: BIOL 205, BIOL 331/531, the equivalents or consent of instructor.

**BIOL 535 PLANT ECOLOGY (4)** Environmental factors and processes which control plant distribution, plant communities and vegetational biomes of North America. An average of 3 laboratory hours per week with two required three-day weekend field trips and a Saturday field trip emphasizing examples from Maryland and the mid-Atlantic states. Prerequisites: BIOL 205 or equivalent.

**BIOL 536 PLANT PHYSIOLOGY (4)** Life functions of plants as related to structure at all levels: cells, organs and the complete organism. Consideration of the interaction of environmental and genetic factors on plant metabolism. Average of 3 laboratory hours per week. Prerequisite: BIOL 205 or equivalent.

**BIOL 539 PLANT ANATOMY (4)** Origin and development of organs and tissue systems in vascular plants. Average of 3 laboratory hours per week. Prerequisite: BIOL 205 or equivalent.

**BIOL 543 FRESHWATER ALGAE (4)** Systematics, structure, ecology, physiology and life histories of freshwater algae. Laboratory will include methods of collection, culture and experimental study of selected species. Prerequisite: BIOL 205 or equivalent, BIOL 331/531 or equivalent recommended.

**BIOL 549 MARINE BOTANY (4)** The ecology, physiology and identification of marine plants emphasizing the Chesapeake Bay and coastal areas of Maryland. Prerequisite: BIOL 347, BIOL 331/531 or equivalents strongly recommended.

**BIOL 553 INVERTEBRATE ZOOLOGY (4)** Aquatic and terrestrial species of phyla from the Protozoa through the Echinodermata with special emphasis on local forms. Economic, ecological and taxonomic considerations. Average of 3 laboratory hours per week. Prerequisite: BIOL 207.

**BIOL 555 FISH BIOLOGY (4)** Introduction to the evolutionary history, functional biology, ecology and conservation of fishes. Laboratory experiences emphasize both identification of fishes and experiments designed to understand their functional biology. Independent research project and weekend field trips are required. Average of 3 hours of lecture and 3 hours of lab per week. Prerequisite: BIOL 207 and CHEM 111 or equivalents; BIOL 325 or equivalent recommended.

**BIOL 556 ORNITHOLOGY (4)** Evolutionary history, morphology, physiology, behavior and ecology of birds. One day-long weekend field trip and several early morning weekday field trips required. Prerequisites: BIOL 207 or equivalent.

**BIOL 560 HISTOLOGY (4)** Tissues of the vertebrate body. Average of 2 laboratory hours per week. Prerequisite: BIOL 214 or equivalent.

**BIOL 561 ENTOMOLOGY (4)** Laboratory and field course in insects. Identification and recognition of the more common families



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and orders and a study of their structure, behavior, ecology, economic importance and control. Average of 3 laboratory hours per week. Prerequisite: BIOL 207.

**BIOL 563 ANIMAL EMBRYOLOGY (4)** Developmental anatomy and the underlying principles involved in development. This last area will be approached from an experimental base. Average of 3 laboratory hours per week. Prerequisite: BIOL 214 or equivalent.

**BIOL 565 MAMMALIAN PHYSIOLOGY (4)** An advanced physiology course which draws heavily upon knowledge gained in earlier courses to understand the aspects of organismal function unique to mammals. The course attempts to integrate all levels of organismal processes, ranging from the molecular to the whole animal, in order to gain an understanding of mammalian function and place it within an evolutionary and ecological context. The laboratories emphasize hands-on learning and experiences with live animals. Minimum of three laboratory hours per week. Prerequisites: BIOL 213 and 214 or BIOL 325 or BIOL 469 or equivalents; CHEM 332 and 351 or equivalents recommended.

**BIOL 567 HERPETOLOGY (4)** Systematic survey of the modern reptiles and amphibians. Emphasis is placed on the evolution of morphological and behavioral traits which have enabled the reptiles and amphibians to successfully exploit their individual habitats. Laboratory includes systematic classification, student seminars and field work. Average of 3 laboratory hours per week. Prerequisites: BIOL 207 or equivalent.

**BIOL 568 ENDOCRINOLOGY (3)** Endocrine mechanisms regulating homeostasis and functional integrity of animals with emphasis on vertebrates. Prerequisite: BIOL 214 or equivalent.

**BIOL 569 COMPARATIVE ANIMAL PHYSIOLOGY (4)** Functions, interactions and regulation of organ systems in animals

and their roles in sensory perception and integration, movement, oxygen utilization, energy procurement, temperature regulation and water metabolism. Prerequisite: BIOL 213, BIOL 214 and BIOL 325 or equivalents.

**BIOL 571 ANIMAL BEHAVIOR (4)** Ethological approach to the comparative study of animal behavior. Major emphases are on the adaptive function of behavior and classification of behavioral mechanisms. Average of 3 laboratory hours per week. Prerequisites: BIOL 207 or equivalent.

**BIOL 585 SEMINAR IN MICROBIOLOGY AND CELL BIOLOGY (1)** Current research articles in cell biology and microbiology are reviewed. Prerequisite: BIOL 315/515, 318/518, 501, or 408/508 or equivalents; may be taken for a maximum of 2 credits.

**BIOL 594 TRAVEL STUDY (1-3)** A detailed investigation of field-oriented problems in biology away from the TU campus. Location and topics to be selected by the department and instructors sponsoring the program. Prerequisite: BIOL 110 and consent of instructor; may be repeated for a maximum of 3 credits.

**BIOL 601 CURRENT TOPICS IN BIOLOGY (3)** Current topics in a specific area of biology. The area will vary each time the course is offered. May be repeated. Prerequisite: A suitable background in the area emphasized.

**BIOL 602 MOLECULAR BIOLOGY (3)** Overview of the base principles of molecular biology including: macromolecules, nucleic acid/protein interactions, replication, transcription, translation, mutations, DNA repair mechanisms, gene regulation and tools and applications of recombinant DNA technology.

**BIOL 604 MECHANISMS IN ANIMAL PHYSIOLOGY (3)** Functional design of animal organ systems and discussion of selected



adaptations permitting survival in challenging environments. Prerequisite: Students must meet the requirements for admission to the master's degree program in biological sciences.

**BIOL 605 PROBLEMS IN BIOLOGY (1-3)** Laboratory or literature research on a particular problem of interest to the student that does not pertain to his/her thesis. Regular conferences with the instructor are required. A maximum of 3 credits allowable for an M.S. degree in biology.

**BIOL 607 PHYSIOLOGICAL ANIMAL ECOLOGY (4)** Physiological responses of animals to varying ecological conditions. Prerequisites: BIOL 603 and BIOL 610.

**BIOL 609 AQUATIC COMMUNITY ANALYSIS (4)** Aquatic communities are used to illustrate principles of experimental design, sampling and statistical analysis. Emphasis on use of multivariate statistics for description of community structure and environmental analysis. Includes laboratory experiments and field sampling. Prerequisite: BIOL 610 or upper-level undergraduate course in ecology.

**BIOL 610 POPULATION AND COMMUNITY BIOLOGY (3)** Processes in biological populations, including population growth, competition and predation, analyzed by the use of conceptual-systems models and simple mathematical models. Prerequisite: BIOL 401/501, BIOL 402/502, BIOL 413/513 or equivalents.

**BIOL 612 MOLECULAR ECOLOGY AND EVOLUTION (3)** Use of molecular techniques in ecology and evolution. Application of DNA sequencing, PCR analysis and DNA fingerprinting to understanding genome evolution, the species concept, evolutionary basis of behavior, population structure and gene flow and efforts in species conservation. Reading and discussion of recent scientific literature. Prerequisites: BIOL 602 or permission of instructor.

**BIOL 613 ANIMAL COMMUNICATION (3)** Survey of visual, chemical, electromagnetic and acoustical systems which have evolved to facilitate information exchange between animals. Attention is focused on the sensory mechanisms employed during communication, as well as the adaptive significance of the message to the sender and the receiver. Prerequisite: BIOL 610 and a suitable background in animal behavior.

**BIOL 614 APPLIED BIOTECHNOLOGY (3)** Overview of basic recombinant DNA technology, gene expression and regulation; medical, agricultural and ecological examples of applied biotechnology; regulations, risks, benefits and bioethics of biotechnology. Prerequisites: BIOL 602 or permission of instructor.

**BIOL 615 PATHOGENIC MICROBIOLOGY (3)** Pathogenic bacteria and viruses, including virulence of causative agents, epidemiology, pathogenesis, diagnosis, prevention and treatment of representative bacterial and viral diseases. Prerequisite: BIOL 421/521, BIOL 315/515 or 318/518 or equivalents.

**BIOL 616 MEMBRANE BIOLOGY (3)** Structure, function and biogenesis of biological membranes. Emphasis on role of membrane in cellular homeostasis, energy transduction and interaction with the extracellular environment. Multidisciplinary perspective taken, drawing on information from molecular biology, cell biology and biophysics. Extensive use of current literature. Prerequisites: BIOL 602 or permission of instructor.

**BIOL 617 MOLECULAR MECHANISMS OF DEVELOPMENT (3)** Molecular and cellular aspects of developmental processes. Emphasis on vertebrate development. Prerequisites: BIOL 602.

**BIOL 618 MOLECULAR MEDICINE (3)** Molecular biology as it applies to medicine, including molecular genetic approaches to clone/detect disease genes, analysis of gene

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function based on human/microbial homologies, prenatal and neonatal diagnosis/screening, tracking infectious disease outbreaks, molecular therapies for disease and impact of human genome project. Ethical issues raised by application of molecular methodology also discussed. Prerequisites: BIOL 602 or permission of instructor.

**BIOL 635 PHYSIOLOGICAL PLANT ECOLOGY (3)** Interactions of plants with the physical environment at a biochemical, physiological and organismal level of integration. Prerequisite: BIOL 402/502 or BIOL 435/535 or BIOL 436/536 or equivalents.

**BIOL 636 PLANT PHYSIOLOGICAL ECOLOGY: METHODS AND INSTRUMENTATION (2)** Methods of analysis of plant physiological responses to environmental factors. Theory, application and interpretation of measurements of plant water relations, nutrient uptake, photosynthesis and growth. Prerequisite: BIOL 635 or concurrent enrollment.

**BIOL 651 OSMOREGULATION (3)** Mechanisms of salt and water regulations in animals. Emphasis on structural and functional modifications in representative species which permit survival in osmotically stressful environments. Prerequisite: BIOL 604.

**BIOL 653 BIOLOGY OF FRESHWATER INVERTEBRATES (4)** Biology of free-living freshwater macro-invertebrates is emphasized. Extensive field and laboratory work deals with morphological, taxonomic, ecological and behavioral features of selected macro-invertebrates. Students must demonstrate a knowledge of scientific literature pertaining to identification of selected genera, demonstrate identification skills via laboratory practicals and collection of local macro-invertebrate fauna. Field trips, collection of macro-invertebrates identified to the genus level and student seminars are required. Prerequisite: BIOL 353/553 and 461/561 or equivalents recommended.

**BIOL 701 NON-THESIS LABORATORY RESEARCH (3)** Research project. Credit granted after paper defended.

**BIOL 703 NON-THESIS LIBRARY RESEARCH (3)** Paper based upon an extensive literature survey. Credit granted after paper defended.

**BIOL 731 PLANT COMMUNITY ECOLOGY (3)** Analysis of plant community ecology through the historical development of the concept of plant succession. Prerequisite: BIOL 402/502 or 435/535 or equivalents, BIOL 610 and 9 graduate credits in biology.

**BIOL 781 RECENT ADVANCES IN BIOLOGY (4)** Factual and technological advances in the five following areas: botany, zoology, ecology, genetics and evolution, cellular and molecular biology. Prerequisite: 9 graduate credits in biology.

**BIOL 797 GRADUATE SEMINAR (1)** Student reports and discussion dealing with biological research. An outline of the seminar and bibliography are required. A maximum of 1 credit is allowable for an M.S. degree in biology.

**BIOL 898 THESIS (6)** An original investigation to be pursued under the direction of one or more faculty members. Credit granted after thesis acceptance.

**BIOL 899 THESIS CONTINUUM (1)**

## CHEMISTRY (CHEM)

**CHEM 500 SEMINAR IN CHEMISTRY (1)** Introduction to chemical literature. Attendance at all seminars and presentation of seminars to the chemistry department on topics selected by the chemistry faculty or selected by the student and approved by the faculty. One and one-half hour seminar period. Prerequisite: CHEM 213/215, CHEM 332; Co-requisite: CHEM 341 or CHEM 342; offered each semester.

**CHEM 501-504 SPECIAL PROBLEMS IN CHEMISTRY (1-3)** A laboratory or library problem in any particular area of chemistry to be selected by the student in consultation with the instructor. Students are required to submit a written report. Prerequisite: Written consent of instructor. Offered each semester; may be repeated for credit.

**CHEM 505-508 INTRODUCTION TO RESEARCH IN CHEMISTRY (1-3)** Individual laboratory and/or library investigation in research interest of an instructor. At the completion of a project the student must write a formal research paper on the work done and the principles involved. The student's performance will be evaluated by the research director and selected members of the faculty. Prerequisite: Consent of instructor. Offered each semester; may be repeated for credit.

**CHEM 518 ADVANCED ANALYTICAL CHEMISTRY (3)** A special topics course dealing with the theory and application of more recent and specialized techniques of chemical separation and analysis. Three lecture hours. Prerequisite: CHEM 415 or CHEM 411. Not open to students with credit for CHEM 412.

**CHEM 534 ADVANCED ORGANIC CHEMISTRY LABORATORY (2)** The design of organic synthesis, advanced laboratory techniques and determination of structure by chemical and spectroscopic means will be taught by laboratory problems and discussion. One lecture hour and 6 laboratory hours. Prerequisite: CHEM 332 and consent of instructor.

**CHEM 535 ADVANCED ORGANIC CHEMISTRY (3)** Advanced topics will include several of: molecular orbital theory, pericyclic reactions, photochemistry and determination of reaction mechanisms by: kinetics, linear free energy relationships, acid-based properties, acid-based catalysis, detection of intermediates, stereochemistry, etc. Three lecture hours. Prerequisite: CHEM 332 and CHEM 342; CHEM 341 recommended.

**CHEM 536 ETHICS IN THE PHYSICAL SCIENCES (2)** Discussion of the integrity of the scientific literature and the responsibilities of scientists to peers, proteges, employers and the public. Examination of principles and of case studies in the physical sciences. Not open to students who have taken WRIT 301.

**CHEM 542 PHYSICAL CHEMISTRY-THERMODYNAMICS (3)** Thermodynamics, phase relations, solution properties, chemical equilibrium and electrochemistry. Three lecture hours. Prerequisite: CHEM 102, MATH 274 and PHYS 222 or PHYS 212. Offered each fall.

**CHEM 543 PHYSICAL CHEMISTRY-STRUCTURE AND KINETICS (3)** Introduction to quantum chemistry, atomic and molecular structure, atomic and molecular spectroscopy. Introduction to statistical thermodynamics, kinetic theory and chemical kinetics. Three lecture hours. Prerequisite: CHEM 102, MATH 274 and PHYS 222 or PHYS 212. Offered each spring.

**CHEM 546 ADVANCED PHYSICAL CHEMISTRY (3)** Two topics in the area of physical chemistry to be covered in-depth. Topics will be selected by the instructor after consultation with the students. Examples of possible topics are: formal wave mechanics, bonding, solid state, liquid state, surface chemistry, colloids, high polymers, rheology, ionic conductivity, electrochemical cells, scattering phenomena, statistical thermodynamics. Three lecture hours. Prerequisite: CHEM 341 and CHEM 342.

**CHEM 554 ADVANCED BIOCHEMISTRY (3)** The use of physical methods in the study of biochemical systems and biochemical thermodynamics; the structure of proteins including X-ray crystallography, macromolecular solution thermodynamics, enzyme kinetics and spectroscopic probing of macromolecular structure will be discussed. Three lecture hours. Prerequisite: CHEM 353 or CHEM 355.



**CHEM 562 CHEMICAL AND BACTERIOLOGICAL STUDIES ON WATER POLLUTION (3)** Deals mainly with water pollution: causes, effects and cures. Considers details of water and waste treatment. Emphasizes technical details of analysis of water. Concerns standards of water purity and variables involved. Demonstration of analytical methods to be given. Case studies and applications are viable approaches to this topic. Three lecture hours. Prerequisite: BIOL 102 and CHEM 110. Offered through College of Continuing Studies (evening and summer) if sufficient demand.

**CHEM 564 CHEMISTRY OF DANGEROUS DRUGS (3)** A study of the chemistry, methods of detection and analysis of narcotics, depressants, stimulants and hallucinogens. Also, the influence of physicochemical properties upon the pharmacological effects of drug-receptor interactions. Historical, forensic and socio-economic implications associated with drug abuse will also be reviewed. Three lecture hours. Prerequisite: CHEM 330 and CHEM 350 or CHEM 331/332; CHEM 210 or CHEM 213/215 recommended.

**CHEM 566 POLYMER CHEMISTRY (3)** Course will cover the following aspects of polymers: structure, physical properties, methods of preparation, rheology, mechanical properties, degradation and stabilization, application and fabrication and related contemporary topics. Carbon chain and heterochain polymers will be discussed and spectroscopic methods of analysis (IR, UV and NMR) will be presented. Three lecture hours. Prerequisite: CHEM 101, CHEM 102, CHEM 331 and CHEM 332.

**CHEM 568 FORENSIC CHEMISTRY (3)** Introduction to chemical and physical analyses used by a modern crime laboratory in the evaluation of physical evidence encountered in criminal acts. Areas of concentration will include drug analysis toxicology, forensic serology, explosives analysis, arson examination, firearms and tool marks and trace evi-

dence. Emphasis will be placed on the value of such examinations as presented by the expert witness in criminal trial. Three lecture hours. Prerequisites: CHEM 101, CHEM 102, CHEM 210 or CHEM 213/215, CHEM 330 or CHEM 332.

**CHEM 570 ORGANOMETALLIC CHEMISTRY (3)** A survey of the chemistry of compounds containing carbon-metal bonds. Synthesis, reactions and structures of compounds such as metal alkalis, carbonyls, pi-complexes and the uses of these compounds in synthesis will be considered. Three lecture hours. Prerequisite: CHEM 331, CHEM 332; CHEM 423 recommended.

**CHEM 572 SPECTROMETRIC METHODS IN CHEMISTRY (4)** This course deals with the theory and application of three of the major instruments used in chemistry today: nuclear magnetic resonance spectroscopy, infrared spectroscopy and mass spectrometry. Emphasis will be on the practical use of the instruments in pure and applied chemical investigations involving students in the actual operation of the instruments. Two lecture hours and four laboratory hours. Prerequisite: CHEM 332 and consent of instructor.

**CHEM 584 MODERN CHEMISTRY FOR TEACHERS: PRINCIPLES AND APPLICATIONS I (3)** A survey of principles and applications of chemistry for secondary school teachers. Lecture: chemical reactions, stoichiometry, atomic structure and theories of chemical bonding. Laboratory: an examination of experiments suitable for the secondary school curriculum with emphasis upon laboratory safety. Two lecture hours and two hours of laboratory-discussion. Prerequisite: High school algebra, experience as secondary school teacher and consent of instructor.

**CHEM 585 MODERN CHEMISTRY FOR TEACHING: PRINCIPLES AND APPLICATIONS II (3)** A survey of principles and applications of chemistry for secondary school



teachers. Lecture: properties of solutions, acid/base theories, reaction kinetics, chemical equilibrium, thermodynamics, state of matter and nuclear chemistry. Laboratory: an examination of experiments suitable for the secondary school curriculum with emphasis upon laboratory safety. Two lecture hours and two hours of laboratory-discussion. Prerequisite: CHEM 383 or CHEM 584 and consent of instructor.

**CHEM 586 MODERN CHEMISTRY FOR TEACHERS: PRINCIPLES AND APPLICATIONS III** (3) Experimental chemistry for secondary school teachers: principles of laboratory measurements, design of experiments, obtaining and interpreting experimental data, laboratory techniques and instrumentation. Two lecture hours and two hours of laboratory discussion. Prerequisite: CHEM 384 or 585 and consent of instructor.

**CHEM 587 MODERN CHEMISTRY FOR TEACHERS: PRINCIPLES AND APPLICATIONS IV** (3) A survey of principles and applications of physical chemistry for secondary school teachers. Chemical thermodynamics, descriptions of solutions, kinetic theory of gases, reaction rates and mechanisms, and introduction to quantum mechanics. Three lecture hours. Prerequisite: CHEM 385 or CHEM 586 and consent of instructor.

**CHEM 588 MODERN CHEMISTRY FOR TEACHERS: PRINCIPLES AND APPLICATIONS V** (3) Organic chemistry for secondary school teachers. Functional groups, reaction mechanisms, natural products. Simple and complex techniques of purification, analysis and synthesis. Three lecture hours and one hour of laboratory. Prerequisite: CHEM 386 or CHEM 587 and consent of instructor.

**CHEM 589 MODERN CHEMISTRY FOR TEACHERS: PRINCIPLES AND APPLICATIONS VI** (3) Principles and applications of biochemistry for secondary school teachers. Structures and functions of biological molecules, enzymes, metabolic energies and

nucleic acids. Three lecture hours. Prerequisite: CHEM 387 or CHEM 588 and consent of instructor.

**CHEM 590 MODERN CHEMISTRY FOR TEACHERS: PRINCIPLES AND APPLICATIONS VII** (3) Modern instrumental methods for secondary school teachers. In integrated laboratory-lecture course discussing four major instrumental methods and their uses in solving typical chemical problems: spectrophotometry, nuclear magnetic resonance spectroscopy, mass spectrometry and chromatography. Two lecture hours and two hours of laboratory-discussion; short field trips may be required. Prerequisite: CHEM 388 or CHEM 589 and consent of instructor.

**CHEM 641 PHYSICAL CHEMISTRY: PRINCIPLES AND APPLICATIONS FOR TEACHERS** (4) Chemical theory, experimental methods and solutions and phases reaction kinetics, applications of quantum mechanics, and instrumental techniques. Prerequisite: CHEM 102, MATH 115 or MATH 119, and PHYS 203 or PHYS 211 or PHYS 221; or secondary school teaching experience. MATH 273 is strongly recommended.

## COMMUNICATION STUDIES (COMM)

**COMM 518 COMMUNICATION TRAINING AND DEVELOPMENT** (3) Instructional strategies for implementing objectives, specifying and evaluating results. Prerequisite: COMM 115 and COMM 216 or COMM 331.

**COMM 519 ORGANIZATIONAL COMMUNICATION** (3) Superior-subordinate communication, message dissemination, information overload, trust levels and work group interaction. Prerequisite: COMM 131.

**COMM 520 COMMUNICATION IN THE LEGAL PROCESS** (3) Focus on communication questions and skills by lawyers, judges,

litigants and jurors in criminal and civil justice. Survey of research related to verbal and nonverbal aspects of communication as they apply to the legal concerns of interview, negotiation and litigation. Prerequisite: Consent of instructor.

**COMM 522 CONFERENCE AND MEETING MANAGEMENT (3)** Communicative details in preparing for and conducting events. Prerequisite: COMM 419/519 may be taken concurrently.

**COMM 601 THEORIES AND RESEARCH IN INTERCULTURAL COMMUNICATION (3)** Analysis of cross-cultural interaction among people in multicultural societies or multicultural organizations. Prerequisite: COMM 379 or MCOM 633 or consent of instructor.

**COMM 602 PUBLIC ADVOCACY AND CONFLICT MANAGEMENT (3)** Theoretical perspectives and practical experience in managing conflict in public communication settings. Focus on presentation advocacy, audience adaptation, small-group communication and conflict resolution. Prerequisite: At least 15 credits of graduate work completed.

**COMM 610 THE TRIAL PROCESS (1)** Civil and criminal trial procedures and legal terminology. Differential tuition applies.

**COMM 611 THE PRACTICE OF LITIGATION CONSULTING (1)** History and types of trial consulting. Techniques of consulting and training. Differential tuition applies.

**COMM 612 JURY BEHAVIOR (1)** Research review of small group dynamics and decision-making with particular focus on the American jury. Differential tuition applies.

**COMM 620 LITIGATION CONSULTING QUALITATIVE RESEARCH METHODS (1)** Trial simulations, focus groups, jury convening and attorney/witness preparation. Prerequisites: COMM 520, COMM 610, COMM 611 and COMM 612. Differential tuition applies.

**COMM 621 LITIGATION CONSULTING QUANTITATIVE RESEARCH METHODS (1)** Research design, sampling and interference, surveys and opinion polling, content analysis and data analysis for legal settings. Prerequisites: COMM 520, COMM 610, COMM 611 and COMM 612. Differential tuition applies.

**COMM 622 PROFESSIONAL ISSUES IN LITIGATION CONSULTING (1)** Evaluation of practices and ethical concerns. Litigation consulting as a business. Prerequisites: COMM 520, COMM 610, COMM 611 and COMM 612. Differential tuition applies.

**COMM 781 INTERNSHIP IN COMMUNICATION CONSULTING (3)** Supervised work in a professional consulting setting. Prerequisites: Completion of at least 9 graduate credits in communication studies and consent of program director.

**COMM 795 INDEPENDENT STUDY IN COMMUNICATION STUDIES (1-6)** Directed study through readings, projects, papers or seminars. May be repeated for a maximum of 6 credits. Prerequisite: 15 credits of graduate-level communication or mass communication courses and consent of instructor.

## COMPUTER SCIENCE (COSC)

**COSC 304 FUNDAMENTALS OF COMPUTER SCIENCES (6)** This course is designed for graduate students to learn programming and computer architecture. Software topics include: structured problem solving, algorithm development, basic data structures and their implementations, sort and search techniques, and introduction to software development. Hardware topics include: digital logic and digital systems, combinatorial and sequential logic, computer arithmetic, the central processing unit, assembly level machine organization, memory system organization, interfacing and communications. Corequisite: MATH 363.

**COSC 305 FUNDAMENTALS OF DATA STRUCTURES AND ALGORITHM ANALYSIS**

(6) This course is designed for graduate students to provide them with the necessary background in data structures and algorithm analysis. Topics include: objects and abstract data types, dynamic variables and pointers, recursion, sort and search algorithms, linear and non-linear structures such as linked lists, trees and graphs, hashing, algorithms time complexity analysis, object-oriented design and programming. Prerequisite: COSC 304.

**COSC 519 OPERATING SYSTEMS PRINCIPLES**

(3) An overview of the principles of operating systems. Topics include multiple processes, process synchronization and intercommunication, resource allocation, memory management, processor scheduling and I/O device management. Prerequisite: COSC 304.

**COSC 553 COMPILER DESIGN I**

(3) Principles, techniques, algorithms and structures involved in the design and construction of compilers. Topics include lexical analysis, formal grammars, syntactic and semantic analysis, error recovery, code generation and optimization. Prerequisite: COSC 304.

**COSC 571 COMPUTER PERFORMANCE EVALUATION**

(3) Computer system performance evaluation methodologies, techniques and tools including different types of monitors as a measurement tool, workload characterization, important performance indices, analytic modeling with particular emphasis on the application of the operational queuing network modeling techniques to performance analysis and technical aspects of computer selection. Prerequisite: MATH 363 and COSC 439/519 as prerequisite or co-requisite.

**COSC 578 DATABASE MANAGEMENT SYSTEMS I**

(3) Build theoretical foundation for database management systems, study different database models, relational algebra,

relational calculus, SQL, ER, EER models, structured query formulations, database design, analysis and modeling, functional dependencies and normalization, and overview of next generation database management systems. Prerequisite: COSC 304.

**COSC 581 ARTIFICIAL INTELLIGENCE**

(3) A survey of the problems and techniques involved in producing or modeling intelligence in computers. Particular emphasis will be placed on representation of knowledge and basic paradigms of problem solving. Topics include game playing, theorem proving, natural language and learning systems. Prerequisite: COSC 304.

**COSC 583 DESIGN AND ANALYSIS OF ALGORITHMS**

(3) Algorithm design such as heuristics, backtrack programming, branch and bound, recursion, simulation and conquer, balancing and dynamic programming. Efficiency of algorithms-NP-complete problems. Prerequisite: COSC 336 or COSC 304.

**COSC 600 ADVANCED DATA STRUCTURES AND ALGORITHM ANALYSIS**

(3) Data abstraction, linear data structures, file organization and access methods, memory management, advanced internal and external sort and search algorithms and the trade-offs involved in the use of different data organization. Prerequisite: COSC 305 or computer science graduate standing.

**COSC 602 COMPUTER VISION AND IMAGE PROCESSING**

(3) The study of image acquisition, representation and pattern recognition, edge detection for computer vision. Topics to be covered include digital image formats, image storage and display, bilevel image processing, measurable properties of objects, grey-level image processing, image classification and object recognition, etc. Prerequisite: COSC 305.

**COSC 605 HUMAN FACTORS AND HUMAN-COMPUTER INTERACTION**

(3) Design of information systems interfaces.



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Discussion of how information systems components and work environments can be constructed to make people more effective, productive and satisfied with their work life. Output and input design, arrangement of displays and controls, case studies in human factors. Prerequisite: TU graduate standing or consent of instructor.

**COSC 609 SOFTWARE PROJECT MANAGEMENT (3)** Factors necessary for the successful management of information systems development or enhancement projects. Both technical and behavioral aspects of project management are discussed. Topics include project management concepts, needs identification, the software project manager, software teams, software project organizations, project communications, software project planning, scheduling, control and associated costs. Project-management software tools will be an integral part of the course. Prerequisite: COSC 305 or equivalent, or consent of instructor.

**COSC 611 COMPUTER SIMULATION (3)** Continuous and discrete event systems simulation application, implementation, role of modeling and languages, experimental design, data collection, verification, validation, object-oriented simulation, random variable generation, Monte Carlo methods for performance evaluation, sensitivity analysis and optimization. Prerequisite: COSC 305.

**COSC 612 SOFTWARE ENGINEERING I (3)** Formal software engineering principles and practices and their application to the development of computer-based systems. Prerequisite: COSC 600.

**COSC 614 SOFTWARE ENGINEERING II (3)** Formal process leading to requirements, design and test specifications, quantitative measures of useful software parameters, review of software systems components and complete design and test processes. Prerequisite: COSC 612.

**COSC 615 COMPILER DESIGN II (3)** Project-oriented course applying the theory to

design a full compiler for a subset of a high-level language. Parsing techniques, symbol table handling, intermediate code generation, run-time memory management, error handling and code optimization techniques. Prerequisite: COSC 600 and COSC 415/553 or equivalent.

**COSC 617 ADVANCED WEB DEVELOPMENT (3)** Design and implementation of distributed information system involving the technologies developed for the World Wide Web (WWW). Emphasis will be given to server architectures, database connectivity and the enterprise packages provided by the Java programming language. Prerequisite: COSC 600 and COSC 457/578.

**COSC 638 ADVANCED COMPUTER ARCHITECTURES (3)** Design principles for multiprocessor and RISC machines, comparison between RISC and CISC architectures, multiprocessor interconnection networks, memory organizations, parallel algorithms for sorting, image processing, FFT and various applications, data flow computers and VLST computations. Prerequisite: COSC 304.

**COSC 639 OPERATING SYSTEMS II (3)** Implementation of operating systems for on-line multiprogramming environment. Primary and secondary storage management techniques, file security, data integrity and a detailed study of operating systems such as UNIX. Prerequisite: COSC 439/519 or equivalent.

**COSC 645 NETWORK SECURITY AND CRYPTOGRAPHY (3)** A broad introduction to cryptography and its application to computer-network security services and mechanisms, such as confidentiality, digital signature, access control and electronic payments. Analysis of software implementations of cryptographic algorithms and network-security protocols. Prerequisite: COSC 600.

**COSC 650 COMPUTER NETWORKS (3)** Data communications concepts and design. Network layers, protocols, security, privacy,



design and performance. LAN and public networks. Prerequisite: COSC 305.

**COSC 655 ADVANCED TOPICS IN PROGRAMMING LANGUAGES (3)** Concepts and structures in design and implementation of widely used programming languages. Characteristics of different forms of programming languages such as functional, object-oriented, concurrent and logic programming. Prerequisite: COSC 305.

**COSC 657 DATABASE MANAGEMENT SYSTEMS II (3)** Relational database systems application, implementation, management, administration, design, advanced data modeling, object-oriented databases, deductive databases, query optimization, functional dependencies, concurrency, security and integrity. Prerequisite: COSC 457/578 or equivalent.

**COSC 661 ARTIFICIAL INTELLIGENCE PROGRAMMING AND ADAPTIVE SYSTEMS (3)** Major differences between AI and conventional programming, symbolic programming techniques and adaptive systems, PROLOG and LISP. Prerequisite: COSC 461/581.

**COSC 665 EXPERT SYSTEM DESIGN AND DEVELOPMENT (3)** Approaches and methods employed in expert system design and development analysis of selected expert systems, prototyping and presentation. Prerequisite: COSC 581 or equivalent.

**COSC 670-679 SPECIAL TOPICS IN COMPUTER SCIENCE (3)** Reading and study in selected topics in the field of computer science; emphasis is on an increased knowledge of computer science. A project or paper is required. Prerequisite: COSC 600 or equivalent and consent of instructor.

**COSC 680 SEMINAR IN COMPUTER SCIENCE (1)** Presentation and discussion of research trends and advanced topics in computer science. Students may enroll in this

course up to three times for a total of 3 credits. Prerequisite: Consent of instructor.

**COSC 682 ADVANCED TOPICS IN AI: MACHINE LEARNING (3)** Learning approaches, methods and designs, selected learning systems and survey of current literature. Prerequisite: COSC 661.

**COSC 686 COMPUTER GRAPHICS (3)** A presentation of the basic concepts in the field of computer and/or displayed graphics. The students will get an understanding of the basic mathematical and physical principles behind computer graphics and will learn a concrete programming package for computer graphics. Topics include animation, user interface, affine geometry and 3-D transformations, lighting and shading, texture mapping, rendering algorithms, ray tracing and modeling. Prerequisite: COSC 305.

**COSC 695 INDEPENDENT STUDY IN COMPUTER SCIENCE (3)** Independent study in selected areas of computer science. Prerequisite: 9 credits at the graduate or upper-division level.

**COSC 714 FUZZY LOGIC IN CONTROL APPLICATIONS (3)** Control theory and dynamical systems are first studied, followed by fuzzy sets, fuzzy memberships functions, fuzzy rules, fuzzy logic and use of neural nets to generate fuzzy rules. Two control applications are studied in department. Prerequisite: COSC 600 or equivalent.

**COSC 715 ROBOTICS (3)** Physical mechanisms of robotics, issues of modeling, planning control and programming. Principles underlying the design and analysis of robotic systems. Prerequisite: COSC 600 or equivalent.

**COSC 716 OBJECT-ORIENTED METHODOLOGY (3)** Object-oriented approach to modeling, problem solving, requirement analysis, system design, system implementation, database design, system engineering

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and software engineering. Prerequisite: COSC 600 or equivalent.

**COSC 720 COMPUTATIONAL COMPLEXITY (3)** Computational complexity, time and storage cost of polynomial. Non-polynomial (NP) and NP-complete problems, randomized computation, cryptography and approximability. Prerequisite: COSC 483/583.

**COSC 725 PROCESS CONTROL AND REAL-TIME SYSTEMS (3)** Analog to digital and digital to analog conversions, signal conditioning and processing, direct digital control of processes, adaptive control of nonlinear systems and real-time programming considerations: response time, survival time, recovery time, and throughput, executive-system calls, memory-related system calls, task-synchronization system calls, multiprocessing, interrupts, task scheduling and task concurrency. Prerequisite: Graduate standing or a course in computer architecture.

**COSC 730 NETWORK MANAGEMENT SYSTEMS (3)** Various network management, configuration, architectures, protocols, design complexities, their software implementation and the network system's pivotal role in the global information super-highway applications. Prerequisite: COSC 650 or equivalent.

**COSC 732 WIRELESS NETWORKS AND MOBILE COMMUNICATIONS (3)** This course covers the principles and practice of wireless networks and mobile communications. Topics include wireless transmission and media access technologies, study of a typical cellular system, satellite networks, wireless LANs, wireless ATM, mobile IP, mobility and TCP, and the wireless application protocol (WAP) for the Web. Prerequisite: COSC 650.

**COSC 740 PARALLEL COMPUTING (3)** Parallel computing and its applications in-

cluding parallel computer models, parallel matrix algorithms, optimization algorithms, complexity of parallel algorithms, parallel programming environment, application of parallel algorithms in sorting, searching, matrix operations, system of linear equations and optimization. Prerequisite: COSC 600 or equivalent and a course in linear algebra.

**COSC 750 NEURAL NETWORKS (3)** Discussion of neural networks, architectures, algorithms and applications, including Hebbian, Hoffeld and competitive learning. ART and Back propagation neural nets. Prerequisite: COSC 600 or equivalent.

**COSC 757 DATA MINING (3)** Designed to provide students with a broad background in data mining techniques and related topics. Real world applications including Web mining will be emphasized. Current data mining tools will be used in student projects. Prerequisites: COSC 578 or equivalent.

**COSC 897 GRADUATE PROJECT/INTERNSHIP IN COMPUTER SCIENCE (3)** Enables students to conduct a study in an advanced computer-related topic or undertake the analysis, design and implementation of a real-world application. The application may be related to an industrial project sponsored by a company or it may be of a mutual interest to the student and a supervising faculty member. Prerequisites: Completion of at least 18 graduate credits towards MS in COSC.

**COSC 898 GRADUATE THESIS (6)** An original investigation using an acceptable research method and design. Prerequisite: Completion of at least 21 graduate credits toward an M.S. degree in computer science.

## DANCE (DANC)

**DANC 551 DANCE EDUCATION AND PUBLIC POLICIES (3)** Examination of strategies for dance arts, advocacy and dance education policies in public schools. Pre-

requisite: DANC 251, dance majors only; by special permit.

## DEAF STUDIES (DFST)

**DFST 509 INTRODUCTION TO DEAF-BLINDNESS** (2) An orientation to the lives of people with both hearing and vision loss. Includes methods for communicating, techniques for guiding, and information on assistive technology. Prerequisite: SPPA 205, 206 and 345/545.

## EARLY CHILDHOOD EDUCATION (ECED)

**ECED 511 PARENTS AND TEACHERS: PARTNERS IN EARLY CHILDHOOD EDUCATION** (3) The development of a rationale for improved parent-teacher relationships in early childhood education programs. The roles of paraprofessionals, specialists and volunteers are considered. Observation, participation, home and school visits by teachers and parents functioning as a team. Prerequisite: 6 credits of early childhood education or approval of early childhood education department.

**ECED 517 EARLY IDENTIFICATION OF LEARNING DISABILITIES** (3) Survey of the nature of learning disabilities in the young child; emphasis on early identification, theoretical approaches, major disability categories; survey of remedial principles. Prerequisite: 6 credits of psychology and 6 credits of early childhood education or approval of early childhood education department.

**ECED 603 TEACHER-LEARNER RELATIONSHIPS IN THE EARLY CHILDHOOD CLASSROOM** (3) Theory, philosophy and research on teacher-learner relationships with emphasis on developing corresponding learning classroom environments and interaction between teacher and learner in the early childhood classroom.

**ECED 604 MATH/SCIENCE IN THE EARLY CHILDHOOD EDUCATION PRO-**

**GRAM** (3) Theory, pedagogy and related research on developmentally appropriate practices in math and science for young children, with emphasis on a constructivist approach to learning.

**ECED 605 THE ARTS AND YOUNG CHILDREN** (3) This course explores the fundamental role of the arts in young children's lives and curricula, expands on teacher understanding of the arts for all individuals, provides references for low- or no-cost materials, as well as concrete, practical strategies for fine arts learning design and implementation. The course identifies how the arts build interest, motivation and learning in all areas of the curriculum.

**ECED 606 RESEARCH AND PRACTICE ON MULTIMEDIA TECHNOLOGY AND LEARNING** (3) Research and practice on multimedia technology and early childhood education. Experience and evaluate resources for young children. Experiment and integrate technology in classrooms with young children, grades Pre-K to 3.

**ECED 607 LEARNER DIVERSITY AND INCLUSION IN EARLY CHILDHOOD EDUCATION** (3) Theory, pedagogy and related research on learner diversity with emphasis on developing appropriate classroom atmospheres, interpersonal interaction and an inclusive community.

**ECED 608 TEACHING AND LEARNING SOCIAL STUDIES IN EARLY CHILDHOOD EDUCATION** (3) An integrated approach to social studies learning in preschool and primary programs, based on an understanding of young children's growth and development, and on appropriate curriculum practices. Addresses the skills, knowledge and attitudes that children need in a diverse, democratic society.

**ECED 609 GROWTH AND DEVELOPMENT OF YOUNG CHILDREN** (3) Current theory and research on the growth and development of young children; methods of studying behavior; implications for early



childhood programs, including curriculum development (to be completed within the first six credits of the program).

**ECED 610 LEARNING ENVIRONMENTS: CURRICULUM AND TECHNOLOGY (3)** Research and practice on school transformations and new educational directions as a result of evolving technologies. Examine how emerging technologies can support curriculum and create new learning environments that are developmentally appropriate for young children.

**ECED 611 TEACHER AS RESEARCHER: RESEARCH METHODS IN EDUCATION (3)** Development of skills, insights and understanding basic to planning and conducting research, with emphasis on interpretation and application of research results. Focus on research methods and literature applicable to early childhood education (to be completed within the first six credits of the program).

**ECED 612 CONFLICT RESOLUTION AND MANAGEMENT IN PROGRAMS FOR YOUNG CHILDREN (3)** Examines the nature of young children's peer conflicts, the role of conflict in children's development and ways for practitioners and families to promote children's prosocial interaction, conflict resolution and early violence prevention. Also addresses adult conflict issues in early childhood settings.

**ECED 613 PROGRAMS FOR INFANTS AND YOUNG CHILDREN (3)** Research, theory and best practice relating to the development and care of young children from 0 to 3. Examines the design, implementation and evaluation of programs for infants and toddlers. Emphasis on the needs of young children and their families in diverse and inclusive settings.

**ECED 615 ADMINISTRATION AND SUPERVISION OF EARLY CHILDHOOD PROGRAMS (3)** Theory and practice of operating programs for young children, staff selection and mentoring; curriculum development; working with families; licensing and

accreditation; budgeting; program and staff evaluation.

**ECED 618 THINKING THROUGH THE PROCESSES AND ACQUISITION OF LITERACY (3)** Literacy acquisition, birth through age 8, through study of learning theories based on brain research, cognition, language acquisition. Strategies for integrating reading and writing processes across the curriculum. Bachelor's degree in ECE or related field, teaching experience or permission of instructor.

**ECED 619 ASSESSMENT, OBSERVATION AND EVALUATION IN EARLY CHILDHOOD EDUCATION (3)** Forms, functions and roles of assessment for planning and implementing effective programs for young children from diverse cultures and home languages and with varied learning needs. Qualitative and quantitative approaches to assessment and evaluation and methods of observing children. Appropriate strategies for conducting, reporting and decision-making related to various procedures and instruments.

**ECED 621 ASSESSMENT OF READING AND WRITING IN EARLY CHILDHOOD EDUCATION (3)** Assessment to Guide Instruction: Assessment of primary grade children's reading and writing. Purposes and types of assessment tools available for use in the classroom, types of information provided by assessment tools and appropriate use of the information including communicating results and formulating specific instructional recommendations to enhance each child's growth in reading and writing.

**ECED 647 ADVANCED PROCESSES OF TEACHING AND LEARNING (3)** Systems of analyzing teaching behavior; models of teaching for achieving cognitive, social and personal learning objectives; and analysis of classroom application of teaching models.

**ECED 665 CURRICULUM THEORY AND DEVELOPMENT (3)** History, theories, research and contemporary influences of curriculum development in early childhood



education; objectives, content and evaluation; teacher as curriculum developers and implementers.

**ECED 694 INTERNSHIP IN EARLY CHILDHOOD EDUCATION PROGRAMS (3-6)** Experience relating theory and practice in early childhood education programs. Prerequisites: Early Childhood graduate student standing and consent of the Early Childhood Education graduate program director.

**ECED 695 INDEPENDENT STUDY IN EARLY CHILDHOOD EDUCATION (3)** Independent study in selected areas of Early Childhood Education. Prerequisites: Early Childhood graduate student standing and consent of the Early Childhood Education graduate program director.

**ECED 696 DIRECTED READINGS IN EARLY CHILDHOOD EDUCATION (3)** Independent readings in journals and professional books in selected areas of Early Childhood Education. Prerequisites: Early Childhood graduate student standing and consent of the Early Childhood Education graduate program director.

**ECED 750 PROGRAM DEVELOPMENT AND EVALUATION IN EARLY CHILDHOOD EDUCATION (3)** The design, development and evaluation of programs in education and human services, including early childhood education. Theory, paradigms and models; policy in the program development process; grant writing; Brofenbrenner's notions of the ecology of human development in the design of programs; budgeting; program evaluation and use of technology in program development.

**ECED 773 SEMINAR IN EARLY CHILDHOOD EDUCATION (3)** The final course for students enrolled in the graduate program in Early Childhood Education. Focus of seminar discussions is on issues and topics of importance in early childhood education. Exploration of theoretical, philosophical, historical and/or sociological foundations of

topics (to be taken in the final semester of the program).

**ECED 898 MASTER'S THESIS IN EARLY CHILDHOOD EDUCATION (6)**

## **ECONOMICS (ECON)**

**ECON 540 PERSONNEL ECONOMICS (3)** Use of economics to solve practical personnel problems with specific issues in training, turnover, hiring and incentives. Fringe benefits, evaluation and legal constraints. Prerequisite: ECON 201.

**ECON 541 LABOR ECONOMICS AND LABOR RELATIONS (3)** The determination of wages. Labor unions: history, structure, activities and effects. Government labor policy. Prerequisite: ECON 201 and ECON 202.

**ECON 574 ECONOMIC ISSUES OF GENDER (3)** Explores the changing role of men and women in the United States and other economies with specific emphasis on issues such as differences in occupations and wages, theories of discrimination, the economics of the household, child care, divorce, poverty and the effect of government programs on families. Prerequisite: ECON 201.

**ECON 585 SEMINAR ON ECONOMIC ISSUES (3)** Research and writing of papers on an economic issue selected by the instructor. Prerequisite: ECON 309, ECON 313 and ECON 310.

**ECON 593 WORKSHOP ON ECONOMIC EDUCATION (3)** Designed to help teachers and school administrators gain a better understanding of the economic working of the society in which we live. Prerequisite: Consent of the instructor.

**ECON 690 INDEPENDENT STUDY (1-3)** Individual and supervised study in selected areas of economics. Prerequisite: Permission of instructor.

**ECON 693 ECONOMIC EDUCATION RESEARCH AND METHODS (3)** Methodology and research in contemporary economic education in the elementary and secondary schools. A contemporary issues approach to economic instruction is employed. Prerequisite: ECON 301, ECON 309, ECON 323 and ECON 335.

**ECON 695 SEMINAR IN ECONOMICS (3)** Research and writing of papers on an economics issue selected by the instructor. Prerequisite: ECON 309, ECON 323 and ECON 335.

**ECON 697 INTERNSHIP IN ECONOMICS (3)** Supervised work experience designed to provide an understanding of the economic system and the practical applications of economic principles. Prerequisite: Consent of internship coordinator.

## GENERAL EDUCATION (EDUC)

**EDUC 503 COMPARATIVE EDUCATION (3)** A study of patterns of education in different cultural settings with implications for the student of American education. Emphasis on cross-cultural, political, economic and social aspects of education. Prerequisite: EDUC 401 or equivalent or consent of instructor.

**EDUC 506 RECENT TRENDS IN TEACHING (3)** Recent teaching strategies, organizational patterns and curricular innovations for levels K-12 are examined. Students may pursue individualized projects. Prerequisite: Student teaching or senior standing with consent of instructor.

**EDUC 507 CONTEMPORARY ISSUES IN EDUCATION (3)** Seminar approach to current issues in education. Prerequisite: Student teaching or senior standing with consent of instructor (no prerequisite when offered during the day).

**EDUC 509 FIELD STUDIES OF THE CHILD AND HIS/HER COMMUNITY (2)** Planning and working with groups of children in approved social agencies or making extensive studies of recreational and non-recreational social agencies. Class discussion and field trips.

**EDUC 515 APPLIED EDUCATIONAL STATISTICS (4)** Educational statistics used in fundamental quantitative research designs. Includes descriptive and inferential through ANOVA. Required laboratory includes current statistical applications software. Prerequisite: Permission of the instructor.

**EDUC 517 CHILDREN'S LITERATURE AND OTHER MATERIALS FOR READING AND LANGUAGE ARTS IN ELEMENTARY SCHOOL (3)** Study of literature, texts and technology of reading and language arts instruction. Attention to authors, illustrators, awards and criteria for selection and importance in curricula. Prerequisite: Two English courses.

**EDUC 553 SUPERVISORY PRACTICES IN TEACHER EDUCATION (3)** Experiences and study in developing particular skills and competencies for supervising quality laboratory/field experiences. Content is designed for supervising teachers, team leaders and resource personnel. Prerequisite: Teaching experience. Graduates count this as a work-shop elective.

**EDUC 560 TEACHING IN A MULTICULTURAL/MULTIETHNIC SOCIETY (3)** The course will provide teacher-education students with the background knowledge, understanding and techniques to deal effectively with children from diverse cultural and ethnic backgrounds. Prerequisite: 3 credits in education or PSYC 201.

**EDUC 570-579 SPECIAL TOPICS IN EDUCATION: (Topic to be named) (1-3)** In-depth study of a selected topic in education.

The specific requirements and prerequisite will vary with each topic and will be designated by the department each time there is a topic scheduled. Graduate credit only with approval of the graduate program director. Each topic may be taken as a separate course.

**EDUC 594 TRAVEL AND STUDY EDUCATION:** (Project to be named) (1-6) Study abroad of educational facilities, programs or practices or selected projects in educational topics. By specific arrangement with program chairperson and sponsoring instructors. Consent of graduate program director required for graduate degree credit.

**EDUC 595 INDEPENDENT STUDY IN EDUCATION:** (Project to be named) (1-4) An opportunity for specially qualified students to undertake research problems or study projects relevant to their interest and training under the direction of a staff member. Prerequisite: Approval of appropriate program chairperson. Graduate credit by consent of graduate program director only.

**EDUC 596 DIRECTED READINGS IN EDUCATION** (1-4) Independent readings in selected areas of education, in order to provide a comprehensive coverage for the individual, or to meet special needs. By invitation of the department to major students. Prerequisite: Approval of appropriate program chairperson. Graduate credit by consent of graduate program director only.

**EDUC 601 CONCEPTS AND ISSUES IN EDUCATION** (3) Social, economic, historical, political and technological trends that shape educational policy and programs. Prerequisite: Graduate standing.

**EDUC 603 SCHOOL LAW** (3) A study of the legal framework within which the public and nonpublic schools function. The course will give attention to the legal relationships among federal, state and local governments; the legal status of school districts, boards of

education and school administrators; the legal status of nonpublic schools and the law regarding all facets of the school program, staff and pupils. Prerequisite: Student teaching or teaching experience.

**EDUC 605 RESEARCH AND INFORMATION TECHNOLOGY** (3) Use of database networks for information retrieval; computer hardware and software application programs appropriate for research and curriculum planning; introduction to distance learning; interactive technologies and resource-based learning. Prerequisite: Teaching experience or completion of student teaching.

**EDUC 607 HOME, SCHOOL AND COMMUNITY** (3) The interactions among home, school and community in educational programs; survey and evaluation of techniques for working with parents; study of various agencies contributing to the education and well-being of children and youth at home and at school. Prerequisite: A course in sociology and approval of the Department of Education.

**EDUC 611 SUPERVISION OF STUDENT TEACHING** (3) An analysis of the roles of the cooperating teacher, college supervisor and student teacher; current practices, issues, problems, trends and evaluation in laboratory experiences and current research. Prerequisite: Teaching experience.

**EDUC 614 ASSESSMENT AND EVALUATION IN EDUCATION** (3) Current trends and techniques in assessment and evaluation. Classroom assessment: development and interpretation of classroom tests, performance criteria and student portfolios. Classroom evaluation: formative, summative and portfolio evaluation.

**EDUC 645 THEORIES IN EDUCATIONAL ADMINISTRATION** (3) Theoretical bases for educational administration. Prerequisite: Teaching experience and teacher certification.



**EDUC 646 HUMAN RELATIONS AND THE PROFESSIONAL (3)** Professional behavior in organizational work place, emphasizing leadership and communication. Prerequisite: Teaching experience or certification.

**EDUC 649 AMERICAN POLITICS AND EDUCATION (3)** The American political structure and its relation to policy making and administration of public education. Topics include educational opportunity, community responsibility and control, accountability, role of the courts, church-state relations and academic freedom. Prerequisite: EDUC 401 and POSC 103.

**EDUC 650 ANALYSIS AND MODIFICATION OF TEACHING BEHAVIOR (3)** Analysis of teaching/learning situations to aid the advanced teacher-education students to develop, refine and prescribe skills and strategies and fieldwork. Prerequisite: Teaching experiences, supervisory experiences, EDUC 453 and/or EDUC 611.

**EDUC 661 RESPONDING TO AND EVALUATING WRITING (3)** Direct assessment using holistic, analytic, primary trait and t-unit analysis; indirect assessment of grammar, punctuation and usage, in-process response techniques. Prerequisite: SCED 603, SCED 605 or SCED 558 or consent of graduate program director.

**EDUC 667 WRITING AS THINKING (3)** Research on the writing-thinking connection; self-analysis of thought processes used while writing; analysis of classroom methods for teaching writing and thinking. Prerequisite: SCED 603, SCED 605 or SCED 558 or consent of instructor.

**EDUC 670-674 SPECIAL TOPICS IN EDUCATION (1-6)** In-depth study of a selected topic in education. The specific requirements and prerequisite will vary with each topic and will be designated by the department each time a topic is scheduled. Approval by the appropriate graduate program director is required. Each topic may be taken as a sepa-

rate course. Prerequisite: Varies with each topic.

**EDUC 695 INDIVIDUALIZED STUDY (3-6)** Individually planned programs which will permit the student to engage in research and/or field experiences relative to the student's professional growth. Admission by application to the graduate program director only.

**EDUC 717 CHILDREN'S LITERATURE AND OTHER MATERIALS FOR TEACHING READING (3)** An in-depth examination of a variety of texts for teaching reading, with particular emphasis on children's literature and reading software; strategies for selecting and evaluating texts. Review of current research. Prerequisite: Admission to M.A.T. program or permission of the graduate director.

**EDUC 730 LEARNING PRINCIPLES FOR TEACHERS (3)** Current theories and research on the nature of teaching and learning; relationship to classroom practice. Prerequisite: Admission to the M.A.T. program.

**EDUC 731 UNDERSTANDING THE CURRICULUM K-12 (3)** Principles and practices of curriculum development, actual school practice and the teacher's role as a curriculum developer. Prerequisite: Admission to the M.A.T. program.

**EDUC 732 RESEARCH METHODOLOGY IN THE INFORMATION AGE (2)** Methods of conducting research using traditional research tools and modern technology. Prerequisite: Admission to the M.A.T. program.

**EDUC 733 TEACHING MODELS AND PROCESSES AND CLASSROOM MANAGEMENT (3)** Models of teaching, analysis of classroom applications and classroom management. Prerequisite: Admission to M.A.T. program.

**EDUC 734 THE TEACHER AS RESEARCHER (3)** Theory and methodology for conducting classroom research with an



emphasis on descriptive research approaches. Prerequisite: Admission to M.A.T. program.

**EDUC 735 PROSEMINAR: PROBLEMS AND ISSUES (3)** Problems and issues that impact teachers and the education process. Prerequisite: Admission to the M.A.T. program.

**EDUC 736 CLASSROOM MANAGEMENT (2)** Disciplinary theories, structuring classes, conflict resolution and coping with deviant behavior. Prerequisite: Admission to the M.A.T. program.

**EDUC 737 TEACHING STUDENTS WITH DISABILITIES IN THE MAINSTREAM (2)** Legal bases, and methods and materials appropriate for teaching mainstreamed handicapped students. Prerequisite: Admission to the M.A.T. program.

**EDUC 741 SEMINAR IN LIABILITY FOR PROFESSIONALS IN EDUCATION (3)** In-depth discussions of a great variety of emerging legal cases appropriate to liability among professionals in education. Emphasis will be given to such topics as: negligence, duty, abrogation of duty, foreseeability, loco parentis, sovereign immunity, suspension and expulsion, professional negotiations, evaluations and student rights and responsibilities. Prerequisite: One course in school law.

**EDUC 745 SCHOOL BUDGETING AND FISCAL PLANNING (3)** Development of a budget on departmental, local school, system-wide and state levels; implementation and evaluation of budgets; long- and short-term fiscal planning. Prerequisite: One course in administration.

**EDUC 761 RESEARCH IN EDUCATION (3)** Theory and methodology of educational research. Prerequisite: EDUC 605.

**EDUC 762 INTRODUCTION TO EDUCATIONAL EVALUATION (3)** Theory and methodology of education evaluation for systematic appraisal of process, program,

staff or institution. Prerequisite: A course in statistics or tests and measurements.

**EDUC 770-774 SPECIAL TOPICS IN EDUCATION (1-3)** In-depth study of a selected topic in education. The specific requirements and prerequisite will vary with each topic and will be designated by the department each time a topic is scheduled. Approval by the appropriate graduate program director is required. Each topic may be taken as a separate course.

**EDUC 787 INTERNSHIP IN TEACHING READING (3)** An internship with a mentor teacher provides an opportunity for an M.A.T. candidate to focus on understanding and demonstrating a balanced approach to teaching reading. The intern will develop a reading portfolio to complete the knowledge and performance expectations of the experience. Prerequisite: REED 601, REED 609, children's literature or permission of the graduate director.

**EDUC 797 INTERNSHIP IN EDUCATION (1-6)** An opportunity to relate theory and practice through experience in such settings as educational institutions and clinics. Plans will be formulated in advance with the graduate program director and approved by the dean of the graduate school. Prerequisite: Consent of graduate program director, who may require other prerequisites.

**EDUC 798 GRADUATE PRACTICUM IN EDUCATION (5 or 10)** Supervised teaching experience at the appropriate school level for students in the M.A.T. program. Prerequisite: Approval of early childhood education, elementary education or secondary education departments and the graduate program director.

**EDUC 898 MASTER OF EDUCATION THESIS (6)** Investigation of selected topics in education.

**EDUC 899 THESIS CONTINUUM (1)**

## ELEMENTARY EDUCATION (ELED)

**ELED 511 STAFF DEVELOPMENT AND LEADERSHIP IN THE ELEMENTARY SCHOOL (3)** An introductory course in elementary school staff development and administration with emphasis upon interpersonal and staff relationships, learning strategies and settings, curriculum developments and school-community concerns. A course designed for classroom teachers, curriculum writers and specialists; senior, helping or resource teachers; teacher advisers; team leaders; grade or department chairpersons and others in leadership roles. Prerequisite: A teaching certificate and/or teaching experience.

**ELED 557 ENGLISH FOR THE NON-ENGLISH SPEAKING CHILD (3)** Methods of teaching English to elementary school children whose native tongue is another language. Prerequisite: Elementary language-arts methods course or elementary teaching experiences or consent of instructor.

**ELED 594 TRAVEL AND STUDY: ELEMENTARY EDUCATION (1-6)** Study abroad for educational facilities, programs or practices or selected projects in elementary education topics. By special arrangement with program chairperson and sponsoring instructors. Consent of graduate program director required for graduate degree credit; may be repeated for a maximum of 6 credits.

**ELED 601 CRITICAL AND CREATIVE-THINKING (3)** Applied theory and research about thinking and brain function. Class participation in strategies involving modes of thought which can be used with elementary and middle school students. Prerequisite: Teaching experience.

**ELED 611 PRINCIPLES AND PROCESSES OF LANGUAGE AND LITERACY (3)** Study of the theoretical foundations of reading and language arts in an elementary school setting. Exploration of theories and

research perspectives on language and literacy development, the nature of reading and writing processes and factors influencing the acquisition of literacy.

**ELED 613 READING AND OTHER LANGUAGE ARTS IN THE ELEMENTARY SCHOOL (3)** Application of principles and processes of language and literacy development to reading and language arts instruction. Examination of instructional models, approaches and strategies for supporting literacy development in diverse classroom settings. Prerequisites: One course in reading instruction.

**ELED 621 LITERACY ASSESSMENT IN THE ELEMENTARY CLASSROOM (3)** Examination of theories and principle of classroom literacy assessment. Practice using a range of formal and informal techniques for assessing reading and writing, and using assessment data to plan instruction. Prerequisites: ELED 611.

**ELED 631 EDUCATING THE GIFTED (3)** Identification of gifted student in elementary and middle schools; curricular adaptations and school programs; stimulating creativity and problem-solving strategies. Prerequisite: Student teaching or teaching experience or consent of instructor.

**ELED 633 READING AND LANGUAGE ARTS FOR GIFTED STUDENTS (3)** Teaching reading and language arts to gifted students, diagnosing levels and needs, evaluating programs, preparing an integrative unit, assessing techniques for teaching high-level comprehension and study skills and locating resources. Prerequisite: One course in children's literature, young adult literature or reading and language arts (advanced) or educating the gifted or permission of instructor.

**ELED 640 DISCIPLINE AND MANAGEMENT IN THE ELEMENTARY SCHOOL (3)** Classroom discipline in the elementary school and development of ways and means of implementing appropriate classroom management techniques. Prerequisite: Student

teaching, teaching experience or consent of instructor.

**ELED 647 ADVANCED PROCESSES OF TEACHING AND LEARNING (3)** Systems for analyzing teaching behavior, models of teaching for achieving cognitive, social and personal learning objectives; and analysis of classroom application of teaching models. Prerequisite: Teaching experience (students enrolling for this class should be teaching).

**ELED 648 DIFFERENTIATING INSTRUCTION FOR ALL LEARNERS (3)** Individualizing learning and restructuring of organizational patterns, with emphasis on learning centers, listening stations, task folders, media centers and computer applications. Prerequisite: Certification and teaching experience or consent of instructor.

**ELED 665 CURRICULUM THEORY AND DEVELOPMENT (3)** History of curriculum development in the elementary school: basic considerations affecting curriculum development, patterns of organization, objectives, practices and evaluation and problems in curriculum development. Prerequisite: Certification and teaching experience or consent of instructor.

**ELED 670-674 SPECIAL TOPICS IN ELEMENTARY EDUCATION (1-3)** Study of a topic in elementary education. Requirements and prerequisites vary with each topic.

**ELED 685 SEMINAR IN ELEMENTARY SCHOOL SOCIAL STUDIES (3)** Trends, content, issues and materials involved in the teaching of social studies. Students explore one aspect of the subject and present findings.

**ELED 695 INDEPENDENT STUDY IN EDUCATION: ELEMENTARY (1-4)** Research problems or study projects relevant to student interest and training. Prerequisite: Consent of the graduate program director prior to registration.

**ELED 716 ADMINISTRATION OF THE SCHOOLS (3)** Principles of elementary school administration, the administrator's role and responsibilities, human relations and personnel management, public relations, management of the school unit and curriculum. Prerequisite: Three years of teaching experience, teacher certification and 9 graduate-level credits.

**ELED 770-774 SPECIAL TOPICS IN ELEMENTARY EDUCATION (1-3)** Study of a selected topic in education. Requirements and prerequisites vary according to topic. Prerequisite: Consent of graduate program director.

**ELED 775 SEMINAR (3)** Trends, issues, problems in elementary education. Quantitative/qualitative investigation of selected aspects of elementary education. Prerequisite: 27 credits of graduate work including EDUC 761.

**ELED 781 SEMINAR IN SUPERVISION (3)** Role of the supervisor, supervisory practices and techniques. Prerequisite: 9 graduate credits.

**ELED 797 INTERNSHIP IN EDUCATIONAL LEADERSHIP (1-6)** Experience relating theory and practice in schools and clinics. Prerequisite: 12 graduate credits.

**ELED 898 MASTER'S THESIS IN ELEMENTARY EDUCATION (6)**

**ELED 899 THESIS CONTINUUM (1)**

## **ELECTRONIC MEDIA AND FILM (EMF)**

**EMF 530 THE MEDIA PRODUCER (3)** Management and administration of film and video projects. Prerequisites: MCOM 267, or MCOM 271, or MCOM 273.

**EMF 573 FILM III: ADVANCED 16MM TECHNIQUES (3)** Seminar in professional

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filmmaking techniques leading to the completion of an original narrative film. Prerequisite: EMF 367.

**EMF 575 FILM ANALYSIS (3)** Style of a director, studio or filmmaking method in terms of thematic and formal properties and their influences upon the art of film. Prerequisite: EMF 221.

**EMF 587 SEMINAR IN DIGITAL POST-PRODUCTION (3)** Professional nonlinear editing skills and techniques including audio and multimedia applications. Prerequisite: EMF 275.

### ENGLISH (ENGL)

**ENGL 501 HISTORICAL LINGUISTICS (3)** Introduction to language typology and Indo-European philology; historical development of linguistics up to the 20th century. Prerequisite: Two English courses (not open to students who have completed ENGL 351).

**ENGL 502 STRUCTURAL LINGUISTICS (3)** A study of the developments in linguistic theory in the 20th century: major figures, De Saussure, Sapir, Bloomfield, Trubetzkoy, Chomsky. Prerequisite: Two English courses (not open to students who have completed ENGL 352).

**ENGL 503 HISTORY OF AMERICAN ENGLISH (3)** Origins and history of American dialects; development of elements of vocabulary, sounds and grammar which distinguish American English; standards of American English. Prerequisite: Two English courses (not open to students who have completed ENGL 353).

**ENGL 511 MEDIEVAL BRITISH LITERATURE (3)** Emphasis on the mystical writers, Piers Plowman, the Gawain-poet and Arthurian literature. Prerequisite: Two English courses (not open to students who have completed ENGL 321).

**ENGL 512 BRITISH MEDIEVAL AND RENAISSANCE DRAMA (3)** Development of the drama, excluding Shakespeare, with em-

phasis on plays by Marlowe, Kyd, Jonson, Ford and Webster. Prerequisite: Two English courses (not open to students who have completed ENGL 322).

**ENGL 514 BRITISH LITERATURE OF THE LATER RENAISSANCE (3)** Major intellectual and literary currents of 1600-1660 in the poetry of Donne, Herbert, Marvell, Jonson and Milton, and the prose of Bacon, Brownie, Burton and Hobbes. Prerequisite: Two English courses (not open to students who have completed ENGL 324).

**ENGL 515 EIGHTEENTH-CENTURY BRITISH LITERATURE (3)** Social and intellectual backgrounds, literary trends and significant authors, such as Swift, Pope, Fielding, Johnson and Boswell, with emphasis on satire. Prerequisite: Two English courses (not open to students who have completed ENGL 325).

**ENGL 516 LITERATURE OF THE BRITISH ROMANTIC PERIOD (3)** Major writers such as Blake, Wordsworth, Coleridge, Byron, Shelley and Keats, from 1790 to 1830 with emphasis on the philosophic and social backgrounds. Prerequisite: Two English courses (not open to students who have completed ENGL 326).

**ENGL 517 AMERICAN DRAMA (3)** American drama from the Colonial period to the present, with emphasis on 20th-century plays by O'Neill, Williams, Miller, Bullins and Wilder. Prerequisite: Two English courses (not open to students who have completed ENGL 331).

**ENGL 518 HISTORY AND LITERATURE OF THE OLD TESTAMENT (3)** The chief books of the Old Testament and the Apocrypha studied from a literary and historical point of view. Prerequisite: Two English courses (not open to students who have completed ENGL 341).

**ENGL 519 FOLKLORE AND LITERATURE (3)** How and why literary artists draw plots, characters, themes and style from an-



cient folk tradition: the anonymous oral narratives, songs, jests and proverbs that circulate in all cultures. Focus on universal folkloric material in such works as the Bible, Aesop's Fables, the Arabian Nights, *Peer Gynt* and *Harvest Home*. Prerequisite: Two English courses (not open to students who have completed ENGL 342).

**ENGL 520 DEVELOPMENT OF THE BRITISH NOVEL: 17TH CENTURY (3)** Georgian fiction and its social background, especially works by Defoe, Richardson, Fielding, Smollett, Steme and Austen. Prerequisite: Two English courses (not open to students who have completed ENGL 420).

**ENGL 521 DEVELOPMENT OF THE BRITISH NOVEL: 19TH CENTURY (3)** Mainly Victorian fiction and its social background, especially works by Scott, the Brontes, Thackeray, Dickens, Eliot and Hardy. Prerequisite: Two English courses (not open to students who have completed ENGL 421).

**ENGL 522 DEVELOPMENT OF THE BRITISH NOVEL: 20TH CENTURY (3)** Modern fiction and its social background, especially works by Joyce, Lawrence, Woolf, Forster, Waugh and Greene. Prerequisite: Two English courses (not open to students who have completed ENGL 422).

**ENGL 523 MODERN BRITISH POETRY (3)** Emphasis on Hopkins, Hardy, Yeats, Auden, Spender, Sitwell, Thomas and Larkin. Prerequisite: Two English courses (not open to students who have completed ENGL 423).

**ENGL 525 CHAUCER (3)** Major poems, especially *The Canterbury Tales* and *Troilus and Cressida*. Prerequisite: Two English courses (not open to students who have completed ENGL 425).

**ENGL 527 SHAKESPEAREAN COMEDY (3)** Shakespeare's development as a poet and dramatist in the comedies and romances.

Prerequisites: Two English courses (not open to students who have completed ENGL 427).

**ENGL 528 SHAKESPEAREAN TRAGEDY (3)** Shakespeare's development as a poet and dramatist in the histories and tragedies. Prerequisite: Two English courses (not open to students who have completed ENGL 428).

**ENGL 529 MILTON AND THE HUMANIST TRADITION (3)** Major poetry and prose with emphasis on Milton's place in the humanist tradition. Prerequisite: Two English courses (not open to students who have completed ENGL 429).

**ENGL 531 LITERATURE OF THE AMERICAN ROMANTIC PERIOD (3)** Social and political backgrounds, 1819-1860, important literary ideas, criticism and major authors, such as Irving, Cooper, Emerson, Thoreau, Hawthorne, Melville and Poe. Prerequisite: Two English courses (not open to students who have completed ENGL 431).

**ENGL 532 LITERATURE OF THE AMERICAN REALISTIC PERIOD (3)** Major writers, such as Dickinson, Twain, Crane and James; important secondary writers; social and political backgrounds; important literary ideas and criticism, 1860-1914. Prerequisite: Two English courses (not open to students who have completed ENGL 432).

**ENGL 533 AMERICAN SHORT STORY (3)** Authors and schools, such as Irving, Hawthorne, Poe, Hemingway, Welty, Wright, Porter, local color writers, realists and naturalists. Prerequisite: Two English courses (not open to students who have completed ENGL 433).

**ENGL 535 DEVELOPMENT OF THE AMERICAN NOVEL: 19TH CENTURY (3)** Major novelists, such as Cooper, Melville, Hawthorne, Twain, Howells, James and Crane. Prerequisite: Two English courses (not open to students who have completed ENGL 435).

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### ENGL 536 DEVELOPMENT OF THE AMERICAN NOVEL: 20TH CENTURY

(3) Major novelists, such as Fitzgerald, Hemingway and Faulkner. Prerequisite: Two English courses (not open to students who have completed ENGL 436).

### ENGL 537 AMERICAN POETRY THROUGH FROST

(3) Puritan beginnings through the early 20th century, with emphasis on Emerson, Poe, Whitman, Dickinson and Frost. Prerequisite: Two English courses (not open to students who have completed ENGL 437).

### ENGL 538 MODERN AMERICAN POETRY

(3) Poetic movements from the 1920s to the 1980s, and major poets, such as Eliot, Stevens, Williams, Lowell, Plath and Rich. Prerequisite: Two English courses (not open to students who have completed ENGL 438).

### ENGL 541 MODERN FICTION TO WORLD WAR II

(3) Works of the modern masters of fiction, with emphasis on Proust, Mann and Joyce. Prerequisite: Two English courses (not open to students who have completed ENGL 441).

### ENGL 542 MODERN FICTION SINCE WORLD WAR II

(3) Works of the significant writers - English, American, and Continental - of the past 30 years, including such figures as Grass, Robbe-Grillet, Solzhenitsyn and Burgess. Prerequisite: Two English courses (not open to students who have completed ENGL 442).

### ENGL 543 MYTH AND LITERATURE

(3) Literary reinterpretations of themes and figures from Greek and Roman mythology. Prerequisite: Two English courses (not open to students who have completed ENGL 343).

### ENGL 544 THE CONTINENTAL NOVEL

(3) A study of major continental novels in translation. Emphasis will be upon related and comparative elements in the novels of writers of France, Germany, Italy and other European countries. Prerequisite: Two En-

glish courses (not open to students who have completed ENGL 344).

### ENGL 546 MODERN DRAMA

(3) British, American and European plays of the late 19th and 20th centuries with attention to playwrights such as Ibsen, Strindberg, Chekov, Shaw, Pirandello, Brecht, Sartre and Beckett. Prerequisite: Two English courses (not open to students who have completed ENGL 346).

### ENGL 550 COMPARATIVE GRAMMAR

(3) Study of English grammar: traditional, structural and transformational. Prerequisite: Two English courses (not open to students who have completed ENGL 350).

### ENGL 551 HISTORY OF THE ENGLISH LANGUAGE

(3) Changes and reasons for the changes in grammar, sound and vocabulary of the language from Old English to modern times. Prerequisite: Two English courses (not open to students who have completed ENGL 451).

### ENGL 552 STRUCTURE OF THE ENGLISH LANGUAGE

(3) A linguistic approach to sounds, forms, syntax and usage. Prerequisite: Two English courses (not open to students who have completed ENGL 452).

### ENGL 561 HISTORY OF LITERARY CRITICISM

(3) Major statements in literary theory from Aristotle to the present, including Horace, Sidney, Johnson, Coleridge, Eliot and Frye. Prerequisite: Two English courses (not open to students who have completed ENGL 461).

### ENGL 565 BRITISH AND AMERICAN PROSE

(3) Nonfictional prose, with emphasis on form and style. Prerequisite: Two English courses (not open to students who have completed ENGL 465).

### ENGL 571 TOPICS IN WORLD LITERATURE

(3) Authors, periods, genres or conventions. Variation in content from year to year; may be reelected once. Prerequisite: Two English courses.

**ENGL 572 TOPICS IN BRITISH LITERATURE (3)** Authors, periods, genres or conventions. Variation in content; may be reelected once. Prerequisite: Two English courses.

**ENGL 573 TOPICS IN AMERICAN LITERATURE (3)** Authors, periods, genres or conventions; variation in content. Prerequisite: Two English courses.

**ENGL 575 TOPICS IN LINGUISTICS (3)** Topics and issues in contemporary linguistics theory, with particular attention to recent interdisciplinary subspecialty developments: psycholinguistics, sociolinguistics, pedagogic linguistics, etc. Topics to vary. Prerequisite: One linguistics course or consent of the instructor. May be reelected once (not open to students who have completed ENGL 475).

**ENGL 576 TOPICS IN MULTIETHNIC AMERICAN LITERATURE (3)** Possible topics include women in ethnic literature, Jewish writers and the Catholic novel. Variation in content; may be reelected once. Prerequisite: Two English courses (not open to students who have completed ENGL 476).

**ENGL 585-586 SEMINAR IN LITERARY STUDIES (3)** Intensive study of one area of British, American or World literature, e.g., a specific author, period, school or genre. Variation in content; may be reelected. Prerequisite: Junior standing.

**ENGL 590 DIRECTED STUDIES IN ENGLISH (3)** Independent reading of a specific author, period, topic, problem or school of literature. Topic selected by student in consultation with professor. May be repeated for a maximum of 6 credits only. Prerequisite: 18 credits in English or 12 credits in English and 6 in a related discipline; minimum 3.00 average in English and the related discipline; consent of department chairperson and instructor (not open to students who have completed ENGL 491).

**ENGL 594 TRAVEL AND STUDY (3-6)** Places and topics to be selected by student in consultation with instructor. Prerequisite: Two English courses.

**ENGL 621 STUDIES IN ENGLISH LITERATURE (3)** Study of one major area of English literature (author, period, movement, etc.); areas vary from semester to semester. Prerequisite: Graduate standing or consent of department.

**ENGL 623 STUDIES IN LITERARY CRITICISM (3)** Study of one major area of literary criticism (author, period, movement, etc.); areas vary from semester to semester. Prerequisite: Graduate standing or consent of department.

**ENGL 625 STUDIES IN AMERICAN LITERATURE (3)** Study of one major area of American literature (author, period, movement, etc.); areas vary from semester to semester. Prerequisite: Graduate standing or consent of department.

**ENGL 627 STUDIES IN WORLD LITERATURE (3)** Study of one major area of world literature (author, period, movement, etc.); areas vary from semester to semester. Prerequisite: Graduate standing or consent of department.

**ENGL 631 STUDIES IN LINGUISTICS (3)** Topics in the technology and philosophy of language: descriptive grammar, psycholinguistics, sociolinguistics, etc. Topics vary from semester to semester. Prerequisite: Graduate standing or consent of department.

## **FAMILY STUDIES (FMST)**

**FMST 570-579 SPECIAL TOPICS IN FAMILY STUDIES (3)** In-depth study of a selected topic in family studies. May be repeated for a maximum of 9 credits. Prerequisite: FMST 101.

## FRENCH (FREN)

**FREN 501 FRENCH PHONETICS (3)** Pronunciation and analysis of spoken French, based on phonological theory. Conducted in French. Prerequisite: FREN 301/302 or equivalent (not open to native speakers of French).

**FREN 502 APPLIED FRENCH LINGUISTICS (3)** Phonetics, morphology, syntax, points of interference. Linguistic study relating to methodology for French teachers. Conducted in French. Prerequisite: FREN 301/302 or equivalent.

**FREN 511 THE FRENCH NOVEL (3)** Study of the French novel and narrative techniques from the 17th century to the present day. Conducted in French. Prerequisite: FREN 321/322 or equivalent.

**FREN 521 FRENCH LITERATURE OF THE 17TH CENTURY I (3)** Selected works from France's major classical writers. Prerequisite: FREN 321/322 or equivalent.

**FREN 525 FRENCH LITERATURE OF THE 18TH CENTURY (3)** Principal works of the major writers with the concurrent literary and philosophical trends. Conducted in French. Prerequisite: FREN 321/322 or equivalent.

**FREN 531 FRENCH LITERATURE OF THE 19TH CENTURY (3)** Selected works of major writers and literary movements: Romanticism, Realism, Naturalism and Symbolism. Conducted in French. Prerequisites: FREN 321/322 or equivalent.

**FREN 541 FRENCH LITERATURE OF THE 20TH CENTURY (3)** The evolution from fin de siècle to the present day of the novel, the theatre and poetry as reflections of the artistic and philosophical developments leading to the modern age. Shifting emphasis from semester to semester. Conducted in French. Prerequisite: FREN 321/322 or equivalent.

**FREN 561 FRENCH DRAMA (3)** Development of the French theatre from medieval to modern times; its literature and staging, illustrated by representative plays. Shifting emphasis from semester to semester. Conducted in French. Prerequisite: FREN 321, 322.

**FREN 570-592 DIRECTED READINGS IN FRENCH (1-3)** Discussion of a central topic with changing emphasis from year to year. Prerequisite: FREN 321 and 322, or equivalent.

**FREN 591-592 DIRECTED READINGS IN FRENCH (1-3)** Reserved for superior students under the guidance of a departmental adviser. Conducted in French. Prerequisite: Graduate standing.

**FREN 605 FRENCH STYLISTIQUES (3)** Practice in writing and comparison of style of various writers. Intensive and detailed textual explanation. Conducted in French. Prerequisite: Undergraduate degree in French or consent of department chairperson.

**FREN 633 SEMINAR ON FRENCH CLASSICISM (3)** The origins and underlying ideas of classicism. Conducted in French. Prerequisite: Undergraduate degree in French or consent of department chairperson.

**FREN 635 SEMINAR IN MEDIEVAL FRENCH LITERATURE (3)** Concentration on a particular topic or on one or two major authors; may be reelected once. Prerequisite: B.A. in French or consent of department chairperson.

**FREN 638 SEMINAR IN 18TH-CENTURY FRENCH LITERATURE (3)** The literature of the French Enlightenment, concentrating on one or two major authors. Conducted in French. Prerequisite: Undergraduate degree in French or consent of department chairperson.

**FREN 639 THE ROMANTIC ERA IN FRANCE (3)** Sources and theories of roman-



ticism. Work of major French romantic writers. Conducted in French. Prerequisite: Undergraduate degree in French or consent of department chairperson.

**FREN 670-679 SPECIAL TOPICS IN FRENCH LANGUAGE, LITERATURE AND CIVILIZATION (3)** Discussion of a central topic with changing emphasis from year to year. Prerequisite: Undergraduate degree in French or consent of department chairperson.

## **GENERAL STUDIES (GENL)**

**GENL 501 TOPICS IN SOCIAL SCIENCE (3)** Issues and problems to be selected by the instructor and studied from the multiple approaches of various social sciences. Prerequisite: 15 credits in the social sciences.

**GENL 511 CREATIVE METHODS OF SOLVING PROBLEMS WORKSHOP (3)** The theory and practice of creative problem-solving techniques. Analysis and practical application of creative processes with attention to skills in data gathering, problem analysis, idea production, solution evaluation and strategy development for implementation. Individual and small group work will be employed. Prerequisites: PSYC 101, EDUC 445, GENL 203 or consent of instructor.

**GENL 521 INTERDISCIPLINARY WORKSHOP IN ASIAN STUDIES (3)** Intensive study of a chosen region of Asia, including its physical environment, historical development, government, society, culture and their interrelationships. An interdisciplinary team of faculty experts will participate, and the region of Asia studied will vary according to demand. Prerequisite: Approval of graduate program director.

## **GEOGRAPHY AND ENVIRONMENTAL PLANNING (GEOG)**

**GEOG 502 ENERGY RESOURCE (3)** Spatial patterns of traditional and alternative forms of energy will be analyzed. The many facets of the energy problem will be analyzed including physical deposits, economic variables, public policy implication and geographical patterns. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 503 SOILS AND VEGETATION (3)** A resource study of the world's soils and plant formations with emphasis placed upon their genesis and spatial differentiations. Prerequisite: GEOG 101 and one of the following: CHEM 101, BIOL 110, BIOL 201 or BIOL 205.

**GEOG 504 INTERPRETATION OF AERIAL PHOTOGRAPHS (3)** Reading and interpretation of aerial photographs. The application of the aerial photograph in the fields of geography, geology and photogrammetry.

**GEOG 505 CARTOGRAPHY AND GRAPHICS I (3)** Study in design, construction and effective application of maps and charts for analysis and publication; practical exercises in the use of cartographic tools, materials and techniques.

**GEOG 506 CARTOGRAPHY AND GRAPHICS II (3)** Continued exercises in map graphics and aerial distribution maps. New techniques in presentation of graphic data and spatial relationships. Prerequisite: GEOG 323.

**GEOG 507 COMPUTER MAPPING (3)** Computer hardware and software for preparation of general-purpose and thematic

maps; application of computer mapping for decision-making purposes. Laboratory projects involving student use of the computer are required. Prerequisite: Prior computer experience (MS-DOS, word processing, spreadsheets and database management systems) is strongly recommended.

**GEOG 508 TECHNIQUES AND MATERIALS FOR GEOGRAPHY TEACHERS (3)** A systematic review of geographic concepts in relation to interdisciplinary studies in the physical and social sciences. Examination of the content of geography and problems of presentation.

**GEOG 510 HISTORICAL GEOGRAPHY OF URBANIZATION (3)** Spatial and temporal development of urbanization and urban morphology from the rise of civilization in the ancient Near East to the contemporary post-industrial city. The entire scope of urban functions is surveyed, with the emphasis on the city as a man-made environment. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 511 CULTURAL GEOGRAPHY (3)** Study of origins and diffusion of cultures and the resulting impact in creating the world's contrasting cultural landscapes. Prerequisite: 6 credits of geography or consent of instructor (not open to students who have completed GEOG 221).

**GEOG 512 ECONOMIC GEOGRAPHY (3)** Designed to explain the location of economic activities through a series of principles and theories. Emphasis on the various sectors of the economy, transportation and economic development. Prerequisite: 6 credits of geography or consent of instructor (not open to students who have completed GEOG 231).

**GEOG 513 SPATIAL ORGANIZATION OF ECONOMIC ACTIVITY (3)** Provides an intermediate-level coverage of the organization of the economy of space. Draws from basic regional economics to illustrate and explain the geographical patterns of land use,

industry, service activities and regional patterns of economic development. Prerequisite: 6 credits of geography including GEOG 359.

**GEOG 515 CLIMATOLOGY (3)** Character, causes and distribution of climatic types. Emphasis upon world pattern. Students may be required to do fieldwork. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 516 QUANTITATIVE METHODS IN GEOGRAPHY (3)** Focus on statistical problems associated with the analysis of geographic data. Emphasis on the unique spatial problems of point pattern analysis, aerial association and regionalization. Prerequisite: 6 credits of geography, MATH 119 or consent of instructor.

**GEOG 517 DESCRIPTIVE METEOROLOGY (4)** Introduction to the various meteorological elements. Emphasis is placed on the interaction of temperature, pressure, wind and moisture in creating weather patterns. Three hours of lecture and 2 hours of laboratory; fieldwork may be required. Prerequisite: 6 credits of natural science or geography or the equivalent.

**GEOG 518 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (3)** Hardware and software for the storage, retrieval, manipulation, analysis and display of data. Emphasizing raster-based geographic information systems. Prerequisite: 6 credits of geography (GEOG 109 and GEOG 221 are strongly recommended).

**GEOG 519 POLITICAL GEOGRAPHY (3)** Effect of political groupings upon human's use of the world and the influence of the geographic base upon political power. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 520 POPULATION GEOGRAPHY (3)** General population theory, data sources for population geographers and the processes of fertility, mortality and migration. Patterns of population growth and change

viewed from both temporal and geographical perspectives. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 522 URBAN SYSTEMS I (3)** Survey of the structure, functions, forms and development of urban units. Emphasis upon the locational features of social, economic and cultural phenomena; fieldwork required. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 523 GIS APPLICATIONS (3)** Geographic information systems for solving real-world problems; vector-based GIS software, microcomputers for development of a GIS application. Prerequisite: Introduction to GIS or consent of instructor.

**GEOG 527 OUTDOOR RECREATION PLANNING AND MANAGEMENT (3)** Outdoor recreation in terms of the relationships among people, land and leisure. Principles of planning, designing and maintaining outdoor recreation areas and facilities. Fieldwork required. Prerequisite: Introduction to GIS or consent of instructor.

**GEOG 551 GROWTH OF GEOGRAPHIC THOUGHT (3)** History, nature and methodology of geography as a discipline. Analysis of schools of geographic thought and critical evaluation of important geographic work. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 553 COMPREHENSIVE PLANNING (3)** The integration of separate urban systems into the comprehensive design of an urban region. Special emphasis will be placed on neighborhood, community and town planning. Fieldwork may be required. Prerequisite: GEOG 391 and GEOG 392 or equivalent and consent of instructor.

**GEOG 557 STUDIES IN NATURAL HAZARDS (3)** The nature, frequency of occurrence and distribution of environmental hazards and their impact on humans. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 559 GEOGRAPHICAL ASPECTS OF POLLUTION (3)** A systematic study of the spatial aspects of air and water pollution, with special emphasis on pollution in the Greater Baltimore area. Field trips will be conducted to pollution sites and pollution control agencies within the local area. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 560 GEOGRAPHY OF ANGLO-AMERICA (3)** Physical and cultural landscapes of the United States and Canada, including patterns of economic development of each region and their relationship to their environmental setting. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 561 GEOGRAPHY OF MARYLAND (3)** A geographical study of the Middle Atlantic region emphasizing Maryland in its megapolitan setting. Much attention will be given to the human and physical elements which have led to the prominence of this region. A supervised research paper will be an important part of this course. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 562 GEOGRAPHY OF AFRICA (3)** A systematic and regional approach to the study of people and environment of Africa, south of the Sahara. Special focus is placed on the distribution of natural resources and the historical-political development of each country as important background for the understanding of current African affairs. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 564 GEOGRAPHY OF EAST ASIA (3)** Regional studies of the physical and cultural foundations in China, Japan and Korea. Emphasis upon human and economic resources and role in world affairs. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 565 GEOGRAPHY OF THE MIDDLE EAST (3)** Analysis of Southwest Asia and North Africa, including major natural and cultural resources, related patterns of spatial organization, economic and political

development and associated problems. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 566 GEOGRAPHY OF EUROPE (3)** Regional analysis and appraisal of the human geography and natural resources of Europe. Problems of nationality, economic development and cultural conflicts. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 567 GEOGRAPHY OF THE FORMER USSR (3)** Physical and cultural patterns and their bearing on the former Soviet Union as a world power. Regional distribution and use of natural and human resources in agriculture and industry. Problems in economic development and production. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 568 GEOGRAPHY OF LATIN AMERICA (3)** Analysis of Latin America will be focusing on the interrelationships between physical and cultural elements which provide a diversity of human habitats throughout the region. Prerequisite: 6 credits of geography or consent of instructor; may be repeated for a maximum of 6 credits.

**GEOG 570-579 SEMINAR: SELECTED TOPICS IN GEOGRAPHY (3)** Reading and research in selected topics in the field of geography. Seminar topics will be announced. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 582 GEOGRAPHY/ENVIRONMENTAL PLANNING INTERNSHIP (1-6)** Supervised placement and research in selected public and private agencies at appropriate institutions. Prerequisite: Consent of chairperson and 6 credits in geography. May be repeated for a maximum of 6 credits (not open to students who have completed 6 credits in GEOG 479).

**GEOG 583 FIELD GEOGRAPHY (2-6)** Practical laboratory experience in techniques

in the collection and analysis of data by observations, measurements, mapping and photographic records. Such techniques are to be applied to selected geographic problems. Prerequisite: 6 credits of geography or consent of instructor.

**GEOG 584 TRAVEL AND STUDY (3-6)** Countries and topics to be selected by departments and instructors sponsoring the program. For complete information contact the chairperson of the department. Prerequisite: Consent of instructor; may be repeated for a maximum of 6 credits.

**GEOG 585 DIRECTED READING IN GEOGRAPHY (3)** Independent reading in selected areas of geography. Open by invitation from the geography department to students taking a major or minor in geography. Prerequisite: 15 credits in geography and a minimum average of 3.00 in geography. May be repeated for a maximum of 6 credits.

**GEOG 586 INDEPENDENT STUDY IN GEOGRAPHY (1-6)** Independent research, study or field experience under supervision of a member of the geography faculty. Designed for advanced students who wish to conduct independent investigation on aspects of geography which are of special interest or not covered in other courses. Registration arranged with department chairperson. Prerequisite: Advanced undergraduate standing with at least 18 credits in geography or graduate standing. May be repeated for a maximum of 6 credits.

**GEOG 601 SEMINAR ON GEOGRAPHICAL PERSPECTIVES (3)** Study of major subfields of geography as they have emerged in the 20th century and their differing viewpoints. Prerequisite: Graduate standing.

**GEOG 621 RESEARCH TECHNIQUES (3)** Investigating the primary sources of information in geography and learning the nature of original investigation. Prerequisite: Graduate standing.



**GEOG 631 REMOTE SENSING (3)** Remote-sensing systems. Interpretation and use of the data products, with emphasis on Land Satellite Imagery (Landsat). Prerequisite: Consent of department.

**GEOG 641 APPLIED PHYSICAL GEOGRAPHY (3)** Physical environment as it influences and is altered by human activities. Prerequisite: GEOG 101 (or equivalent).

**GEOG 642 ENVIRONMENTAL POLLUTION (3)** World distributions of major categories of pollution - air, water, chemical, noise, solid waste and nuclear - and their environmental implications. Mandatory field trips. Prerequisite: Consent of department.

**GEOG 651 SEMINAR IN APPLIED-POPULATION GEOGRAPHY (3)** Focus on obtaining, interpreting and using population data for applied purposes. Prerequisite: Consent of instructor.

**GEOG 652 SEMINAR IN MEDICAL GEOGRAPHY (3)** Medical geographic principles and techniques applied to the study of health issues in contemporary society. Emphasis on tools, methodology and problem-solving situations. Prerequisite: GEOG 375 or consent of instructor.

**GEOG 661 STUDIES IN ECONOMIC GEOGRAPHY (3)** The study of selected geographical topics dealing with spatial distributions of economic activities. Topics will be announced. Prerequisite: Consent of department (no more than 6 credits may be applied toward a degree).

**GEOG 671 STUDIES IN PHYSICAL GEOGRAPHY (3)** Selected geographical topics dealing with physical landscape phenomena, especially with regard to distribution, relationships and significance to mankind. Topics will be announced. Prerequisite: Consent of department (no more than 6 credits may be applied toward a degree).

**GEOG 672-679 SPECIAL TOPICS IN GEOGRAPHY AND ENVIRONMENTAL PLANNING (3)** Topics in geography or environmental planning. Varies each semester. Prerequisite: Consent of department.

**GEOG 681 SEMINAR IN POLITICAL GEOGRAPHY (2-6)** Special subjects dealing with geography of international politics, e.g. boundary problems, global strategy, space, sovereignty. Topics to be announced. No more than 6 credits may be applied toward a degree. Prerequisite: Consent of department.

**GEOG 683 SEMINAR: ENVIRONMENTAL PROBLEMS IN MARYLAND (3)** Individual research on a selected environmental problem in Maryland. Prerequisite: Consent of department.

**GEOG 691 URBAN GEOGRAPHY STUDIES (2-6)** Selected topics dealing with the application of geography to planning, retail and industrial location, and trade analysis; topics to be announced. Prerequisite: Consent of department (no more than 6 credits may be applied toward a degree).

**GEOG 701 LAND USE STUDIES (2-6)** Selected problems of urban, rural and rural-urban landscapes, which consider and account for geographic differences in land utilization; topics to be announced. Prerequisite: Consent of department (no more than 6 credits may be applied toward a degree).

**GEOG 771 SEMINAR IN REGIONAL GEOGRAPHY (2-6)** Description, analysis and interpretation of natural and cultural phenomena in certain significant geographic regions; seminar topics will be announced. Prerequisite: Consent of department (no more than 6 credits may be applied toward a degree).

**GEOG 797 RESEARCH (2-6)** Investigation of problem or problems based upon field and library study, which will contribute to geographical knowledge. Prerequisite: Consent

of department (no more than 6 credits may be applied toward a degree).

**GEOG 898 MASTER'S THESIS (6)** Prerequisite: GEOG 621 and consent of department.

**GEOG 899 THESIS CONTINUUM (1)**

## **GEOLOGY (GEOL)**

**GEOL 505 ENVIRONMENTAL GEOLOGY (4)** Earth's natural surface systems (hydrologic, atmospheric and climatic): causes and extent of human modifications; potential solutions to resulting problems. Prerequisite: GEOL 121.

**GEOL 515 HYDROGEOLOGY (4)** Geological aspects of ground water; origin, occurrence and movement; resource evaluation; flow modeling and contamination. Prerequisite: Required: CHEM 102, PHYS 212 or PHYS 242; recommended: GEOL 321 and GEOL 443.

**GEOL 521 STRUCTURAL GEOLOGY (4)** Description and interpretation of shape and internal fabric of deformed rock bodies and analysis of mechanics by which they were deformed. Prerequisite: GEOL 121 and PHYS 211 or equivalent.

**GEOL 531 MINERALOGY (4)** The study of minerals with emphasis on crystallography, crystal chemistry and chemical-structural classification. Laboratory identification of minerals both in hand specimen and thin section by application of principles of optical mineralogy. Three lecture hours and 2 hours of laboratory. Prerequisite: GEOL 121 and CHEM 110.

**GEOL 533 PETROLOGY OF IGNEOUS AND METAMORPHIC ROCKS (4)** Study of the properties and genesis of two major rock groups. Megascopic and microscopic techniques in rock classification. Environments of formation. Three lecture hours and

2 hours of laboratory. Prerequisite: GEOL 331.

**GEOL 541 OPTICAL MINERALOGY AND PETROGRAPHY (3)** Course includes the theory and application of polarized light and elements of crystallography in the analysis of rock-forming minerals by use of a petrographic microscope. Prerequisite: GEOL 333.

**GEOL 543 SEDIMENTOLOGY AND STRATIGRAPHY (4)** Production, transport and deposition of sediments and sedimentary bodies for the development of facies models useful in interpretation of the stratigraphic records. Prerequisite: GEOL 121 and CHEM 110. Not open to students who have successfully completed PHSC 443.

**GEOL 551 PETROLOGY OF SEDIMENTARY ROCKS (3)** Macro- and microscopic analysis of sedimentary rocks. Classifications and diagenetic processes. Prerequisite: GEOL 443. Offered spring semester alternate years.

**GEOL 557 PHYSICAL OCEANOGRAPHY (3)** Physical, chemical and geologic characteristics of ocean basins, boundaries and sea water including origin and behavior of waves and currents. Prerequisite: PHYS 211 or PHYS 241 and CHEM 110, or consent of instructor.

## **GERONTOLOGY (GERO)**

**GERO 501 SOCIAL ISSUES IN HUMAN LIFESPAN TECHNOLOGY (3)** Technologies that provide a longer and better quality life; social, financial, ethical and legal implications. Prerequisites: BIOL 110, GERO 101.

**GERO 550 DIRECTED READINGS IN GERONTOLOGY (3)** Systematic inquiry into a topic of the student's choice. Prerequisite: Graduate standing and consent of adviser.

**GERO 601 SEMINAR IN PROFESSIONAL GERONTOLOGICAL ISSUES (3)** Issues re-

lated to demographic changes, community services and standards for specific service areas.

**GERO 610 APPLIED RESEARCH METHODS (3)** Research methods for applied practice settings. Prerequisite: PSYC 212 or consent of instructor.

## GERMAN (GERM)

**GERM 527 GERMAN CLASSICISM (3)** Goethe, Schiller, Lessing and others. Conducted in German. Prerequisite: GERM 321 or equivalent.

**GERM 531 ROMANTICISM (3)** German literature during the Romantic era (1790-1830): Hoelderlin, Novalis, Brentano, Tieck, Grill-parzer. Conducted in German. Prerequisite: GERM 321 or equivalent.

**GERM 541 MODERN GERMAN LITERATURE (3)** The modern masters: Kafka, Mann, Hesse, Rilke, Brecht. Conducted in German. Prerequisite: GERM 321 or equivalent.

**GERM 542 GERMAN LITERATURE SINCE 1945 (3)** Themes and movements since World War II. Poetry: Eich, Enzensberger, Celan, Bachmann; prose fiction: Boell, Grass; drama: Borchert, Duerrenmatt, Frisch. Conducted in German. Prerequisite: GERM 321 or equivalent.

**GERM 561 GERMAN DRAMA OF THE 19TH AND 20TH CENTURIES (3)** The development of modern German drama in the successive literary movements, beginning with Kleist. Conducted in German. Prerequisite: GERM 321 or equivalent.

**GERM 565 GOETHE'S FAUST (3)** A study of background, themes and structures of this masterpiece. Conducted in German. Prerequisite: GERM 321 or equivalent.

**GERM 570-579 SPECIAL TOPICS IN GERMAN (3)** Discussion of central topic with changing emphasis from year to year. Con-

ducted in German. Prerequisite: GERM 321 or equivalent.

**GERM 581 THE GERMAN NOVELLE (3)** The theory and development of the Novelle in German literature from Goethe to the present. Conducted in German. Prerequisite: GERM 321 or equivalent.

**GERM 591-592 DIRECTED READINGS IN GERMAN (1-3)** Reserved for superior students under the guidance of a departmental adviser. Conducted in German. Prerequisite: Graduate standing.

**GERM 670-679 SPECIAL TOPICS IN GERMAN (3)** Discussion of a central topic concerning literature and society with changing emphasis from year to year. Prerequisite: Undergraduate degree in German or consent of department chairperson.

## HEALTH CARE MANAGEMENT (HCMN)

**HCMN 541 LEGAL AND ETHICAL ISSUES IN HEALTH ADMINISTRATION (3)** Examines legal and ethical issues in the administration of health programs. Emphasis is placed on the impact of cost-containment efforts, quality and malpractice concerns, profit seeking in health, biomedical advances and new delivery mechanisms. Prerequisite: Consent of instructor. (formerly HLTH 541)

## HEALTH SCIENCE (HLTH)

**HLTH 501 TEACHING ABOUT DRUGS AND SEX (3)** Content, procedures and methods for presenting sensitive subjects, including human sexuality and drugs. Prerequisite: Permit only.

**HLTH 505 DRUGS IN OUR CULTURE (3)** In-depth review of harmless, harmful, useful and useless substances which may affect behavior or mood; the interaction of psychological, sociological and physiological components included. Prerequisite: Permit only.

**HLTH 511 HEALTH AND LATER MATURITY: THE AGING PROCESS (3)** An approach to the conservation of human resources with an emphasis on understanding attitudes and practices related to health in later maturity. Designed for students with a personal or professional interest in the field.

**HLTH 551 ECOLOGICAL ASPECTS OF HEALTH (3)** Examination of the interrelationship between man and his environment. Emphasis is placed upon health aspects of pollution, housing, sanitation, radiation, behavioral disorders and epidemiology. Prerequisite: Permit only.

**HLTH 570-579 HEALTH WORKSHOP (3)** For teachers, administrators and individuals concerned about health-related fields. Contemporary health aspects are considered with emphasis on implementation of positive behavior aimed at improving the health of the individual and the community. Students who elect this course for 6 credits will participate in two workshops. Enrollment is limited to 25.

**HLTH 591 HEALTH-DIRECTED READINGS (1-3)** Independent reading in health or related disciplines. Prerequisite: Permit only.

**HLTH 594 HEALTH TRAVEL AND STUDY (3)** Examination of various types of health care delivery in the countries and cities visited in comparison with that of the United States. For complete information contact the department chairperson. Prerequisite: HLTH 101 and either HLTH 201 or HLTH 202 or consent of instructor.

**HLTH 595 [695] INDEPENDENT STUDY (3)** Directed study on specific problems in health and related fields. Prerequisite: Permit only.

**HLTH 601 PROBLEMS IN SCHOOL HEALTH (3)** Structure, organization, scope, content and practices in school health as revealed through literature and research.

**HLTH 611 CURRENT LITERATURE IN HEALTH (3)** Research findings concerning knowledge, attitudes, behavior and educational techniques in health. A comprehensive review of health-related periodicals. Prerequisite: Permission of instructor.

**HLTH 615 COMMUNITY HEALTH: QUALITATIVE AND QUANTITATIVE ELEMENTS (3)** Vital and health statistics, population dynamics, epidemiology, quantitative models and simulation for health systems planning/evaluation. Prerequisite: Permit only.

**HLTH 617 HEALTH ADMINISTRATION (3)** Dynamics of the health industry: concepts of management and administration. Prerequisite: Permission of instructor.

**HLTH 619 ORGANIZING SYSTEMS OF CARE FOR CHRONICALLY ILL AND PHYSICALLY DEPENDENT POPULATIONS (3)** This course will offer an in-depth examination of the public and private sectors of the long-term care industry as well as the political and regulatory structures that impact them. Issues of access and availability to services and housing options will be discussed in the context of relevant research examining costs and quality of care. Readings and class discussions will focus on managerial challenges associated with developing more efficient systems of care for populations with special needs (e.g., the frail elderly, developmentally challenged, non-aged physically disabled, etc.). Prerequisite: HLTH 617 or consent of instructor.

**HLTH 625 RESEARCH METHODS IN HEALTH (3)** Research and statistical designs related to health science and allied health disciplines. Prerequisite: HLTH 615.

**HLTH 627 HEALTH AND WORKER PERFORMANCE (3)** Analyzes health issues that affect worker performance, e.g., high blood pressure, cancer, substance abuse, divorce, career crises, aging, AIDS, sexual abuse and child-care arrangements, from the view of



the employee. Emphasis is on the content of each issue with direct application to worksite problems. Prerequisite: HLTH 631.

**HLTH 631 PROGRAM PLANNING IN HEALTH EDUCATION (3)** Planning models in health with integration to program planning for health information and health promotion. Skills developed in proposal writing. Prerequisite: Permission of instructor.

**HLTH 633 HEALTH CARE SYSTEMS (3)** Development of the American health care system and trends in organization, administration, funding and legislation. Prerequisite: Permission of instructor.

**HLTH 635 EDUCATIONAL STRATEGIES FOR HEALTH (3)** A seminar analyzing the application of education and social science theories for health promotion and health education. Prerequisite: Permission of instructor.

**HLTH 637 SKILL DEVELOPMENT: LEADERSHIP IN THE HEALTH CARE SETTING (3)** Didactic and experiential activities in community health education with emphasis on human interaction leadership skills. Prerequisite: Permission of instructor.

**HLTH 639 INTRODUCTION TO HEALTH BEHAVIOR & HEALTH PROMOTION (3)** Course provides the foundation for understanding health promotion and health behavior. Aspects of organizing, marketing, implementing and evaluating health promotion programs are addressed.

**HLTH 641 PATIENT EDUCATION: INTRODUCTION AND APPLICATION (3)** Education of the patient in terms of personal health behavior in relation to chronic and communicable disease. Emphasis on local patient education programs. Prerequisite: Permission of instructor.

**HLTH 643 HEALTH EDUCATION: CURRICULUM DEVELOPMENT AND SUPERVISION (3)** Methods and techniques for

designing and implementing school health education. Prerequisite: Permission of instructor.

**HLTH 645 HEALTH CARE POLICY (3)** An examination of public and private health care policy making and implementation. Particular attention is paid to current policy issues and to the roles and powers of consumers, administrators, legislators and regulators. Prerequisite: Permission of instructor.

**HLTH 647 HEALTH CARE FINANCIAL MANAGEMENT (3)** Examines financial aspects of health care, including accounting and budgeting. Aspects of production, distribution and organization and health services are reviewed from financial and economic perspectives. Prerequisite: HLTH 615. Also listed as IDHP 647.

**HLTH 649 PROGRAM EVALUATION (3)** This course will describe the purpose, applications and role of evaluation and promotion programs. It will enable the students to understand and apply three levels of evaluation: process evaluation, program evaluation and evaluation research. Prerequisite: HLTH 631.

**HLTH 651 PLANNING AND MARKETING HEALTH IN BUSINESS AND INDUSTRY (3)** Health promotion and delivery in the profit and not-for-profit sectors. Concepts and application of planning and marketing health in various settings. Prerequisite: HLTH 617. Also listed as IDHP 651.

**HLTH 670-679 SPECIAL TOPICS (3)** Focuses on currently important health topics: fitness in a hypokinetic world, aging, death, alcohol and its abuse, consumerism, disease, weight control, value clarification and development of a personal philosophy of health. Prerequisite: Permit only.

**HLTH 689 FIELD EXPERIENCE (3-9)** Supervised, on-site experience in the following community health settings: hospital, clinic, agencies, business/industry. Prerequisite: Permit only.

**HLTH 691 DIRECTED READINGS IN HEALTH (3)** Individual study of a problem in health through consultation with faculty members. Prerequisite: Permit only.

**HLTH 785 GRADUATE SEMINAR IN HEALTH (3)** Analysis of research trends and issues in health education. Student presentation of research designs and projects. Professional membership and ethics. Prerequisite: HLTH 625.

**HLTH 897 GRADUATE PROJECT IN HEALTH SCIENCE (3)** Individual study and preparation of a project which is oriented toward the application of specific techniques in health education. Prerequisite: HLTH 785.

**HLTH 898 MASTER'S THESIS IN HEALTH (6)** An original investigation using an acceptable research method and design conducted under the direction of one or more faculty members. Prerequisite: HLTH 785.

**HLTH 899 THESIS CONTINUUM (1)**

## **HISTORY (HIST)**

**HIST 501 ANCIENT NEAR EASTERN CIVILIZATIONS (3)** The civilizations of Mesopotamia and Egypt and the peripheral developments in Syria-Palestine and Asia Minor. Prerequisite: HIST 101 or consent of instructor.

**HIST 502 HISTORY OF SOUTHERN AFRICA (3)** Social and cultural change in South Africa from early times to present. Prerequisite: HIST 135 or consent of instructor.

**HIST 503 ALEXANDER THE GREAT AND HIS SUCCESSORS (3)** Conquests of Alexander the Great: culture and religion of Greece and Near East in the Hellenistic period. Prerequisite: HIST 101 or consent of instructor.

**HIST 504 ANCIENT GREEK CIVILIZATION (3)** The civilization of classical

Greece, including the Minoan and Mycenaean bronze age antecedents, to 362 B.C. Prerequisite: HIST 101 or consent of instructor.

**HIST 505 ROMAN CIVILIZATION (3)** The civilization of ancient Rome from the foundation of the city to the collapse of the Roman Empire in the West. Prerequisite: HIST 101 or consent of instructor.

**HIST 506 WOMEN IN 20TH-CENTURY U.S. HISTORY (3)** A multicultural perspective on politics, work, family and sexuality in women's lives in the United States from 1900 to present. Prerequisite: HIST 145, and either HIST 146 or HIST 148.

**HIST 507 DEMOCRATIZATION IN LATIN AMERICA (3)** Analysis of the failure and successes in building democratic political institutions in Latin America; emphasis on 1930s to present. Prerequisite: HIST 122 or permission of instructor.

**HIST 508 LIFE HISTORIES OF AFRICAN WOMEN (3)** Methodological analysis of lives of selected African women from diverse African cultures compared with the lives of women throughout the world. Prerequisite: 6 credits from history and/or women's studies.

**HIST 509 TRADITIONAL INDIA: ITS HISTORICAL DEVELOPMENT (3)** Development of the history and culture of India from prehistoric times until the beginnings of European dominance in the 18th century. Prerequisite: 6 credits in history or consent of instructor.

**HIST 510 HISTORY OF MODERN INDIA (3)** The history of the Indian subcontinent since 1750. Stressing the rise of British power, the colonial experiences, the development of nationalist movements and the problems of independence in present-day India, Pakistan and Bangladesh. Prerequisite: 6 credits in history or consent of instructor.

**HIST 511 HISTORY OF MODERN SOUTHEAST ASIA (3)** The development of Burma, Thailand, Malaysia, Indonesia, Cambodia, Vietnam and the Philippines since 1500, with emphasis on the colonial experience and development of modern nationhood. Prerequisite: 6 credits in history or consent of instructor.

**HIST 512 IMPERIAL CHINA: THE LAST DYNASTY (3)** Ching (Qing) Dynasty, 1644-1912; focus on the 19th-century collision of imperial China and the West. Prerequisite: HIST 111 or 6 credits of history.

**HIST 513 REVOLUTIONARY CHINA (3)** The ongoing Chinese revolution from the overthrow of the imperial government through the Nationalist and Communist periods. Prerequisite: HIST 111 or 6 credits in history.

**HIST 514 THE ANDEAN REPUBLICS (3)** Social, economic and political developments in Peru, Bolivia and Ecuador from independence to the present.

**HIST 516 BRITISH HISTORY: 1760-1902 (3)** Political change and transformation of British government from George III until emergence from Splendid Isolation. Explores growth of the imperial system. Prerequisite: HIST 103 or HIST 108.

**HIST 519 JAPAN, 1830-1930 (3)** Japan's transition from feudalism and national seclusion to emergence as a modern nation-state with an overseas empire and a parliamentary form of government. Prerequisite: HIST 110, HIST 111 or 6 credits in history.

**HIST 520 JAPAN, 1930-PRESENT (3)** Japan's transition from militarism and foreign aggression in the 1930s to postwar pacifism, democracy and dynamic economic growth. Prerequisite: HIST 111, HIST 119 or 6 credits in history.

**HIST 521 HISTORY OF MEXICO: PRE-COLUMBIAN AND COLONIAL (3)** The

political, economic, social and cultural developments from early pre-Columbian civilizations to the movement for independence. Prerequisite: 6 credits in lower-division history.

**HIST 522 HISTORY OF MEXICO: NATIONAL PERIOD (3)** The political, economic, social and cultural developments from independence to the present. Prerequisite: 6 credits in lower-division history.

**HIST 526 GAYS AND LESBIANS IN U.S. HISTORY (3)** Multicultural perspectives on gay and lesbian cultures and communities and their struggles against institutionalized homophobia in education, the military, the media, medicine, religion and government. Prerequisite: 3 credits in history or women's studies, or consent of instructor.

**HIST 527 EUROPEAN MILITARY HISTORY 1871-1925 (3)** Minor wars of 1871-1913, the buildup to World War I, the war and its aftermath seen in the context of diplomatic, political and socioeconomic history. Prerequisite: HIST 103 or HIST 108 or consent of the instructor (not open to students who have completed HIST 413).

**HIST 529 EUROPEAN MILITARY HISTORY 1925-1945 (3)** Military institutions of the interwar period, the buildup to World War II and the European War, seen in the context of diplomatic, political and socioeconomic history. Prerequisite: HIST 103 or HIST 108 or consent of the instructor (not open to students who have completed HIST 413).

**HIST 530 (310) NATIONALISM IN 20TH CENTURY EAST AND SOUTHEAST ASIA (3)** Introduction to the contentious issue of nationalism and state-building through belief case studies of China, Japan, Vietnam and Indonesia. Prerequisites: 6 credit hours of history.

**HIST 531 AMERICAN MILITARY HISTORY 1898-1945 (3)** Campaigns, tactics and institutional development of the armed

forces in the context of politics and diplomacy from the Civil War through the Great Depression. Prerequisite: HIST 145 and either HIST 146 or HIST 148.

**HIST 532 AMERICAN MILITARY HISTORY SINCE 1945 (3)** Campaigns, tactics and institutional development of the armed forces in peace and war, seen in the context of politics and diplomacy; emphasis on World War II, Korea and Vietnam. Prerequisite: HIST 145 and either HIST 146 or HIST 148.

**HIST 533 THE AMERICAN COLONIES: 1492-1763 (3)** Founding and the political, economic and social development of the American colonies. Prerequisite: HIST 145 or HIST 241 or consent of instructor.

**HIST 534 THE AMERICAN REVOLUTIONARY PERIOD: 1763-1789 (3)** From the end of the Seven Years' War to the ratification of the Constitution. Prerequisite: HIST 145 or HIST 241 or consent of instructor.

**HIST 535 THE EARLY NATIONAL PERIOD (3)** The United States from the Constitutional Convention to the election of 1820; the Federalist Decade and the Jeffersonian Era. Prerequisite: HIST 145.

**HIST 536 THE JACKSONIAN ERA (3)** The United States from 1815 to 1845; political, social and economic currents of the period. Prerequisite: HIST 145.

**HIST 537 THE CIVIL WAR (3)** Sectionalism, the coming of the war and the war years. Emphasis on political, economic and social issues. Prerequisite: HIST 145.

**HIST 538 THE ERA OF RECONSTRUCTION (3)** Political, economic and social study of the reconstruction era, the war years to 1877 and its aftermath. Prerequisite: HIST 145.

**HIST 539 THE U.S. 1865-1901: AGE OF ENTERPRISE (3)** Industrialization of the United States, the rise of big business and an examination of resulting problems in economic, social and political life. Prerequisite: HIST 145, and either HIST 146 or HIST 148.

**HIST 540 THE U.S. 1892-1920: AGE OF REFORM (3)** America's efforts to deal with the political, social and economic problems of industrial life; emphasis on the Populist movement; imperialism and the Spanish-American War; the administrations of Theodore Roosevelt, William Howard Taft and Woodrow Wilson. Prerequisite: HIST 145, and either HIST 146 or HIST 148.

**HIST 541 THE F.D.R. ERA (3)** History of the United States from the 1920s through World War II, with emphasis on the presidential years of Franklin D. Roosevelt. Prerequisite: HIST 145 and either HIST 146 or HIST 148.

**HIST 542 RECENT AMERICAN HISTORY: 1945-1975 (3)** History of the United States from World War II through the mid-1970s, including political, social, economic and diplomatic developments. Prerequisite: HIST 145 and either HIST 146 or HIST 148.

**HIST 544 SOCIAL HISTORY OF THE UNITED STATES TO 1865 (3)** History of American life from the 17th century to the Civil War, focusing on problems relating to social structure, popular culture and family, and religious and educational institutions. Prerequisite: HIST 145.

**HIST 545 SOCIAL HISTORY OF THE UNITED STATES SINCE 1865 (3)** History of American life from the Civil War to the present, focusing on problems relating to social structure, popular culture and family, religious and educational institutions. Prerequisite: HIST 145 and either HIST 146 or HIST 148.



**HIST 546 A HISTORY OF AMERICAN BUSINESS (3)** A study of industry, finance, commerce and agriculture from the Civil War to the present. Prerequisite: 3 credits in history and either consent of instructor or junior standing.

**HIST 547 CONSTITUTIONAL HISTORY OF THE UNITED STATES TO 1863 (3)** Development of American constitutionalism in theory and practice to 1868. Prerequisite: HIST 145 and either HIST 146 or HIST 148.

**HIST 548 THE BILL OF RIGHTS AND THE CONSTITUTION: 1941 TO THE PRESENT (3)** Interpretation of the Bill of Rights before and after the Warren Court. Prerequisite: HIST 145 and either HIST 146 or HIST 148.

**HIST 550 DIPLOMATIC HISTORY OF THE UNITED STATES SINCE 1900 (3)** Continuation of HIST 369 to the present with added interest in the emergence of the United States as a major world power. The role of the United States in modern warfare, worldwide economic and financial affairs, overseas expansion, the diplomatic impact of conflict in ideologies and current international crises. Prerequisite: HIST 145 and either HIST 146 or HIST 148.

**HIST 551 EARLY AMERICAN FRONTIER (3)** The westward movement and the effect of the frontier process on social, economic and political institutions of the United States and the attitudes of the American people to 1850. Prerequisite: HIST 145.

**HIST 552 THE FAR WESTERN FRONTIER (3)** The expansion into the trans-Mississippi West and the impact of the frontier process on the attitudes of the American people and on the social, economic and political institutions of the United States in the 19th and 20th centuries. Prerequisite: HIST 145 and either HIST 146 or HIST 148.

**HIST 553 THE CITY IN AMERICAN HISTORY (3)** The development of the city and

its impact on American social, cultural, intellectual, political and economic life. Prerequisite: HIST 145, HIST 146 or HIST 148 or two of the following: GEOG 391, SOCI 327, POSC 305 or consent of instructor.

**HIST 555 HISTORY OF NATIVE AMERICANS: THE EAST (3)** Topical and regional ethnohistory of the native peoples of Eastern America and their relations with non-native peoples and governments, precontacts to the present. Prerequisite: 3 credits in American history.

**HIST 556 HISTORY OF NATIVE AMERICANS: THE WEST (3)** Topical and regional ethnohistory of the native peoples of Western America and their relations with non-native peoples and governments, precontacts to the present. Prerequisite: 3 credits of American history (not open to those who have completed Indian-White Relations in American History).

**HIST 558 WORKERS AND WORK IN THE UNITED STATES (3)** The changing nature of agricultural, domestic and industrial work; business-labor relations; labor unions and leaders; role of labor in mainstream and radical political movements. Emphasis on the late 19th and 20th centuries. Prerequisite: HIST 145 and either HIST 146 or HIST 148.

**HIST 559 HISTORY OF CANADA (3)** Canadian history with emphasis on the period since 1867. Particular attention will be given to the problems of cultural dualism and confederation. Prerequisite: HIST 145 and either HIST 146 or HIST 148.

**HIST 560 HISTORY OF MARYLAND FROM COLONIAL TIMES TO THE PRESENT (3)** Major events and forces that have shaped the political, social, cultural and economic development of Maryland. Prerequisite: 3 credits in United States history.

**HIST 563 AFRICAN-AMERICAN HISTORY TO THE MID-19TH CENTURY (3)** Po-

litical, economic and social history of African Americans from their African origins through the antebellum period. Prerequisite: HIST 145.

**HIST 564 AFRICAN-AMERICAN HISTORY FROM THE MID-19TH CENTURY (3)** Political, economic and social history of African Americans from the Civil War through the civil rights era. Prerequisite: HIST 145 and either HIST 146 or HIST 148.

**HIST 565 IMMIGRANTS AND IMMIGRATION IN THE U.S. (3)** Comparative social, cultural and economic history of selected ethnic groups and their relationship to the dominant culture; emphasis on the late 19th and 20th centuries. Prerequisite: 3 credits of United States history or consent of the instructor.

**HIST 566 COMPARATIVE HISTORY OF THE MODERN FAMILY (3)** Impact of economic, social and reproductive changes on family life and structure. Prerequisite: 3 credits of history, sociology or women's studies.

**HIST 567 THE EARLY MIDDLE AGES: 300-1050 (3)** The rebuilding of Europe after the collapse of the Roman Empire. Emphasis on the Church Fathers, the Germanic tribes, Carolinian culture, feudalism and the Vikings. Prerequisite: HIST 102 or consent of instructor.

**HIST 568 THE HIGH MIDDLE AGES: 1050-1350 (3)** The flowering of medieval culture. Emphasis on the role of the church, the emergence of the national monarchies of Western Europe and the creation of towns and universities. Prerequisite: HIST 102 or consent of instructor.

**HIST 569 THE RENAISSANCE ERA: 1300-1500 (3)** Political, economic, social and cultural changes in late medieval and Renaissance Europe. Prerequisite: HIST 102 or consent of instructor.

**HIST 570 THE REFORMATION: 1500-1648 (3)** Religious, political, economic and

social changes in Reformation and Counter-Reformation Europe. Prerequisite: HIST 102 or consent of instructor.

**HIST 572 EUROPE: 1815-1914 (3)** Major economic, political, social and intellectual currents of the period. The effects of the industrial revolution, the development of nationalism and imperialism and the origins of World War I. Prerequisite: HIST 103 or HIST 108.

**HIST 576 DIPLOMATIC HISTORY OF EUROPE: 1815-1939 (3)** An in-depth study of specific diplomatic crises, with emphasis on the impact of each upon the European balance of power. Prerequisite: HIST 103 or HIST 108.

**HIST 577 ECONOMIC HISTORY OF EUROPE TO THE MID-18TH CENTURY (3)** A study of the European economy to the middle of the 18th century. Particular attention will be given to the development of commerce, capitalism, manufacture and mercantilism. Prerequisite: HIST 102.

**HIST 579 EUROPEAN IDEAS: FRENCH REVOLUTION TO THE PRESENT (3)** Religious, scientific, political and social theories of the European intellectual class seen in their historical content from the French Revolution to the present. Prerequisite: HIST 103 or HIST 108 or consent of instructor.

**HIST 580 GREAT BRITAIN IN THE 20TH CENTURY (3)** Political, social and economic developments in Great Britain from 1897 to the present with emphasis on social reform, the two World Wars, Socialism and the Labor Party, economic decline, the dismantling of the Empire and entry into the European community. Prerequisite: HIST 103 or HIST 108.

**HIST 581 FRANCE: 1763-1871 (3)** Old Regime and the impact of successive revolutions upon French society. Emphasis upon the role of France in the growth of European liberalism and nationalism. Prerequisite: HIST 103 or HIST 108.

**HIST 582 GERMANY: 1871-1945 (3)** Brief topical analysis of 19th-century background. Concentration on the Bismarckian Empire, Weimar Republic and the Third Reich, emphasizing the interrelationship between internal developments and Germany's role in Europe and the world. Prerequisite: HIST 103 or HIST 108.

**HIST 584 RUSSIA/SOVIET UNION: 1894-1953 (3)** Political, ideological, economic and cultural factors influencing the fall of the monarch, the Bolshevik Revolution, Leninism and Stalinism. Prerequisite: HIST 231 or HIST 103 or HIST 108 or consent of instructor.

**HIST 585 HISTORY OF SOVIET RUSSIA SINCE STALIN: 1953 TO PRESENT (3)** Topical analysis of political history and theory, economic development, foreign affairs, social change, and cultural and literary trends. Prerequisite: HIST 151 or HIST 231 or HIST 108 or consent of instructor.

**HIST 586 EUROPE IN THE THIRD WORLD: COLONIALISM TO CRISIS (3)** The impact of modern European colonialism on the societies of the Third World, chiefly Africa and Asia. Primary emphasis on the 19th and 20th centuries. Prerequisite: HIST 103 or HIST 108 or consent of instructor.

**HIST 587 A HISTORY OF DIPLOMACY (3)** Evolution from its origins to the present with emphasis on the modern period. Historic changes which shifting ideologies and new technologies have wrought in the role of the diplomat. Prerequisite: HIST 103 or HIST 108.

**HIST 588 HISTORY OF MANAGEMENT (3)** The theory, organization and operation of selected political, religious, military, economic and social institutions of the Western world. Prerequisite: 3 credits in history and either consent of instructor or junior standing.

**HIST 590 INTERPRETIVE PROBLEMS IN HISTORY (3)** An in-depth study of histori-

cal interpretations of selected topics; may be repeated in a different topic for a total of 6 credits. Prerequisite: 12 credits in history appropriate to topic.

**HIST 591 BIOGRAPHICAL STUDIES IN HISTORY (3)** A study of selected historical figures who have shaped or reflected the past. Figures to be selected by the instructor; may be repeated in different historical figures for a total of 6 credits. Prerequisite: 6 credits in history appropriate to topic.

**HIST 592 HISTORICAL THEMES (3)** A study through lectures and discussions of a historical topic selected by the instructor; may be repeated in a different topic for a total of 6 credits. Prerequisite: 6 credits in history appropriate to topic.

**HIST 593 DIRECTED INDIVIDUAL RESEARCH (2-4)** Research and reading dealing with a historical topic to be selected by the instructor and student; considerable attention to methodology; may be repeated for a total of 6 credits. Prerequisite: 15 credits in history and a minimum average of 3.00 in history and consent of instructor and department chairperson.

**HIST 594 TRAVEL AND STUDY (3-6)** Countries and topics to be selected by the departments and instructors sponsoring the program. For complete information, write the chairperson of the department early in the fall of the academic year preceding the semester of intended study; may be repeated in different countries and topics for a total of 6 credits. Prerequisite: Upper-division status and consent of instructor.

**HIST 596 COLLOQUIUM (3)** Group discussion of reading in history or related disciplines approached from a viewpoint that is primarily historical and dealing with broad periods, topics, problems or comparative developments selected by the instructor(s); may be repeated in a different topic for a total of 6 credits. Prerequisite: Consent of instructor and 15 credits in history or 9 credits in history and 6 credits in the related discipline.

**HIST 597 DIRECTED READING (2-4)** Independent reading in history or related disciplines approached from a viewpoint that is primarily historical and dealing with specific periods, topics, problems or comparative developments selected by the student in consultation with the instructor(s); may be repeated for a total of 6 credits. Prerequisite: 15 credits in history or 9 credits in history and 6 credits in the related discipline and a minimum average of 3.00 in history and the related discipline and consent of department chairperson.

**HIST 599 THE MAKING OF THE MODERN MIDDLE EAST (3)** Ethnic, political, religious and economic factors that have shaped the Middle East since 1798. Prerequisite: HIST 107 or 6 credits in history or consent of instructor.

**HIST 602 HISTORY OF HISTORICAL THEORY (3)** Survey of historical theory from the ancients to the present, with emphasis on 19th- and 20th-century ideas and their implications for practicing historians. Prerequisite: Admission to history graduate program.

**HIST 605 ENGLAND AND RUSSIA: COMPARATIVE PARLIAMENTARY INSTITUTIONS (3)** Comparative history of development of English and Russian political institutions. Prerequisite: Admission into graduate program.

**HIST 607 LATIN AMERICA AND THE UNITED STATES (3)** Graduate seminar on Latin American/U.S. relations. Emphasis on the social and cultural implications of U.S. power and influence in Latin America. Comparative analysis of Latin American responses to U.S. actions. Prerequisite: Admission to graduate program.

**HIST 609 MODERN THEORIES OF WAR (3)** Theories of the meaning and conduct of war since the Enlightenment; emphasis on European and American thought and practice with some attention to non-Western

contributions. Prerequisite: Admission to graduate program.

**HIST 617 HISTORY INTERNSHIP (3)** Practical experiences within the historical profession. Prerequisite: Approval of the department chairperson.

**HIST 683 DIRECTED INDIVIDUAL RESEARCH (2-4)** Research and reading with a historical topic to be selected by the instructor and student. Prerequisite: Graduate standing and 18 credits of history and consent of the instructor and department chairperson.

**HIST 697 DIRECTED READING IN HISTORY (2-4)** Reading in areas of history selected by the instructor and the student. Prerequisite: Graduate standing and 18 credits of history and consent of the instructor and department chairperson.

**HIST 802 CAPSTONE: COMPARATIVE HISTORY SEMINAR (3)** Seminar in historiography and comparative history. Prerequisite: 15 credits in graduate history and special permit.

**HIST 898 THESIS (6)** A 70-100 page M.A. thesis. Prerequisite: Special permit.

## HUMAN RESOURCES DEVELOPMENT (HRD)

**HRD 601 INTRODUCTION TO HUMAN RESOURCES (3)** Overview of the Human Resource profession, including emerging trends, professional roles and professional competencies. Prerequisite: Graduate standing in HRD or consent of instructor.

**HRD 602 LEADERSHIP THEORY AND PRACTICE (3)** Theories of leadership applied to the development of leaders within organizations and the development of individual leadership skills. Prerequisite: Graduate standing in HRD program or consent of instructor.



**HRD 603 PROFESSIONAL DEVELOPMENT IN HRD (3)** Analysis and development of professional competencies, knowledge and attitudes according to roles of the Human Resource Development specialist. The overall goal of the course is to help students develop and compile a professional portfolio that they can use for career advancement. Prerequisite: Completion of 18 credits in HRD coursework or consent of instructor.

**HRD 604 COMPENSATION AND BENEFITS MANAGEMENT FOR THE HRD PROFESSIONAL (3)** This course is designed to acquaint the HRD professional with the fundamental concepts, issues and techniques associated with designing, managing and evaluating compensation and benefits programs so that the HRD professional can contribute more effectively to improving organizational performance. Prerequisites: Graduate standing in the Human Resource Development Program or consent of instructor.

**HRD 627 SEMINAR IN TRAINING AND DEVELOPMENT (3)** Study of current trends in training and human resource development applied to various types of organizational environments. Prerequisite: Graduate standing in the Human Resource Development Program or consent of instructor.

**HRD 629 PERSONNEL SELECTION (3)** Study of research and application of personnel planning, recruiting and selection practices within organizations. Prerequisite: Graduate standing in the Human Resource Development Program or consent of instructor.

**HRD 641 CHANGE IN THE WORKPLACE (3)** An interdisciplinary study of workplace changes. Topics to be covered are: international competition, work force demographics, information technology, changing nature of work and the learning organization. Prerequisite: Graduate standing in the Human Resource Development Program or consent of instructor.

**HRD 642 ORGANIZATIONAL BEHAVIOR (3)** Theoretical and applied aspects of organizational behavior through the use of psychological concepts. Individual, group, technological and structural theory are examined in the context of organizational effectiveness. Prerequisite: Graduate standing in the Human Resource Development Program or consent of instructor.

**HRD 644 TEAM BUILDING (3)** Psychological and organizational aspects of group dynamics and work teams. Application of theory to actual terms in workplace. Prerequisite: Graduate standing in the Human Resource Development Program or consent of instructor.

**HRD 679 SPECIAL TOPICS SEMINAR (3)** Topics vary, according to the instructor. Prerequisite: Graduate standing in Human Resource Development Program or consent of the instructor.

**HRD 695 INDEPENDENT STUDY OR INTERNSHIP IN HRD (3)** Individual and supervised study or project development in selected areas of human resource development.

## **INTERDISCIPLINARY FINE ARTS (IDFA)**

**IDFA 601 ENHANCING READING THROUGH THE ARTS (3)** Arts experience to facilitate skills, comprehension, analysis and synthesis of text-based learning materials. Includes pre-reading skills, readiness activities, vocabulary building, critical analysis and creative writing. Prerequisite: Graduate standing.

**IDFA 602 ARTS ACROSS THE CURRICULUM (3)** This course will explore the interdisciplinary planning and teaching strategies integrating the arts (dance, music, theatre and visual arts) with academic subjects in the K-8 curriculum.

**IDFA 603 DRAMA IN THE CLASSROOM (3)** This course provides a practical and

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philosophical framework for integrating drama across the curriculum. Students will explore the history and significance of creative play and gain practical knowledge of many play structures. The course will also explore the Drama in Education model and relate dramatic principles to total learning. Students will design and implement arts-integrated lesson and unit plans and define philosophies for the arts-integrated teacher.

### **IDFA 701 INTERDISCIPLINARY SEMINAR IN THE CONTEMPORARY ARTS**

(3) An interdisciplinary graduate seminar in the contemporary arts; topics vary by semester. Prerequisite: Graduate level standing or permission of the instructor.

## **INTERDISCIPLINARY HEALTH PROFESSIONS (IDHP)**

**IDHP 501 HIV/AIDS TESTING AND CONFIDENTIALITY IN THE 21ST CENTURY** (3) Explores societal factors, resources, policies, health care delivery, legal/ethical issues and counseling. Students will be prepared for Maryland State Certification as HIV testing counselors. Prerequisites: HLTH 101 or NURS 406, PSYC 101, SOCI 101 and one of the following: BIOL 213, BIOL 215, HLTH 207 or NURS 204 or consent of instructor.

**IDHP 600 TRANSITIONS: HEALTH CARE PROFESSIONALS IN A CHANGING ENVIRONMENT** (3) Introductory course in CAT program, focused primarily on context and stakeholders of health delivery system, along with leadership and teamwork.

**IDHP 602 CLINICAL PROGRAM PLANNING, IMPLEMENTATION AND EVALUATION** (3) Planning clinical programs for health care environments and business planning. Course includes practical skill development in the design of a program proposal, including elements of reimbursement and regulatory requirements. Students will apply

tracking systems to evaluate program effectiveness.

**IDHP 605 MANAGING HEALTH CARE PROFESSIONALS** (3) This course provides an overview of issues and skills involved in effectively managing the health professional. The course will focus on the application of the entire range of supervisory skills and personnel management practices to the tasks of administering a health care operation. Also listed as OCTH 605.

**IDHP 610 ADMINISTRATION OF HEALTH CARE ORGANIZATIONS** (3) Capstone course in the interdisciplinary Clinician to Administrator Transition (CAT) certificate program. Integration and application of knowledge and skills related to program planning, financial management and management of human resources. Prerequisite: Completion of the first five courses in the CAT program.

**IDHP 647 HEALTH CARE FINANCIAL MANAGEMENT** (3) Examination of financial aspects of health care, including accounting and budgeting. Aspects of production, distribution and organization and health services are reviewed from financial and economic perspectives. Also listed as HLTH 647.

**IDHP 651 PLANNING AND MARKETING HEALTH IN BUSINESS AND INDUSTRY** (3) Health promotion and delivery in the profit and not-for-profit sectors. Concepts and application of planning and marketing health in various settings. Also listed as HLTH 651.

**IDHP 741 ETHICAL AND LEGAL ISSUES IN CLINICAL PRACTICE** (3) Provides an interdisciplinary exploration of legal and ethical issues in clinical practice, research, administration and teaching. It includes emphases on cultural diversity, truth-telling, informed consent, confidentiality, accountability, reimbursement pressures, new technologies and treatments, end-of-life care, licen-

sure concerns, practice in varied settings and organizational ethics. Prerequisite: Admission into the graduate school.

## **INSTRUCTIONAL TECHNOLOGY (ISTC)**

**ISTC 501 UTILIZATION OF INSTRUCTIONAL MEDIA (2-3)** Materials, devices, techniques and settings are presented in an overview of the field of instructional technology. Laboratory experiences are provided in the operation of instructional hardware. Must be taken for 2 credits if student has taken ISTC 269. Prerequisite: Junior standing or departmental approval.

**ISTC 541 COMPUTER TECHNOLOGY AND UTILIZATION (3)** Exploratory course concerned with the rationale for and use of computers in learning and related administrative matters. Techniques are examined for the organization, storage, processing and retrieval of data. Applications include the computer for instruction, the management of instruction and simulation. Time spent sharing computer experiences. Field trips to on- and off-campus computer installations. (Note: The course will not prepare students for occupations in computer science.) Prerequisite: Junior standing.

**ISTC 553 INSTRUCTIONAL PHOTOGRAPHY (3)** This course explores the use of film-based and digital-based photography for education and training. The application of visual theory principles, review of basic photographic techniques, photo editing in a digital environment and instructional design competencies will be emphasized.

**ISTC 571 REFERENCE AND INFORMATION SOURCES (3)** The bibliographic method, fundamental reference sources and searching techniques for print and non-print materials are examined. Students are required to demonstrate competencies in the

use of reference sources. Prerequisite: Junior standing.

**ISTC 573 CATALOGING AND CLASSIFICATION OF MEDIA (3)** Cataloging, subject analysis, classification and bibliographic control. The use of commercial processing services and central processing in the school system. The concept of a unified catalog and materials center for print and non-print materials is stressed. Prerequisite: Junior standing or above.

**ISTC 601 ORGANIZATION AND ADMINISTRATION OF MEDIA CENTER PROGRAMS (3)** Organizational patterns, management procedures and supervisory methods and techniques for instructional material centers. Topics include: facilities, finance, selection, procurement, security and basic maintenance of equipment and materials; center operation, extension and in-service programs, assessments of systems and programs and public relations. Prerequisite: 6 upper-division credits of ISTC courses.

**ISTC 605 WEB-BASED INSTRUCTION IN EDUCATION (3)** Principles of Web-based instruction in creating learning environments. Pedagogical, technological, organizational, institutional and ethical issues related to design, development and delivery. Prerequisite: ISTC 541 or equivalent.

**ISTC 615 MEDIA SELECTION (3)** Criteria used to select media, classroom management techniques in using media and various evaluation instruments. Prerequisite: 6 upper-division credits of ISTC courses.

**ISTC 617 DISTANCE EDUCATION IN THEORY AND PRACTICE (3)** Relevant concepts and issues in distance education including theoretical foundations, existing institutions and concepts and current practice.

**ISTC 633 INSTRUCTIONAL VIDEO (3)** This course explores the design and produc-

tion of video for education training. The emphasis on the instructional systems design process is supported by laboratory tasks that lead students through the process of producing instructional video. Computer-based editing is used. Prerequisite: Bachelor's degree.

#### **ISTC 635 THEORY AND DESIGN OF COMPUTER-BASED INSTRUCTION (3)**

This advanced course investigates several theoretical strategies appropriate to the development of CBI. A variety of educational and training environments are explored in the context of the Instructional Systems Design process. A laboratory task enables students to use the more complex functions of an authoring system. Prerequisite: ISTC 687.

#### **ISTC 655 MEDIA DESIGN AND PRODUCTION (3)**

This course gives an introduction and overview to digital media (multimedia) in instructional settings. A laboratory task enables students to develop original media, gather and edit digital media assets, integrate their products into a computer presentation program and output their results in a variety of digital and analog media formats.

#### **ISTC 663 APPLIED PSYCHOLOGY OF LEARNING (3)**

Behaviorist, cognitivist and constructivist learning theories are discussed. Emphasis is on the application of those theories to instruction. Prerequisite: ISTC 541 or equivalent.

#### **ISTC 667 INSTRUCTIONAL DEVELOPMENT (3)**

Overview and application of the instruction systems approach for problem solving and the design of instruction. Media selection, needs assessment, prototyping, implementation and evaluation of instructional systems.

#### **ISTC 671 ADVANCED REFERENCE (3)**

Bibliographic research for the retrieval of information using manual and automated information delivery system techniques. Prerequisites: ISTC 471 or equivalent.

#### **ISTC 673 INSTRUCTIONAL FACILITIES DESIGN (3)**

A systems approach to the integration of media and facilities into a unit to fulfill instructional training goals. Time and sequential phasing relationships. Prerequisite: 6 upper-division credits of instructional technology at the 500 level or above, and consent of chairperson.

#### **ISTC 674-679 SPECIAL TOPICS IN INSTRUCTIONAL TECHNOLOGIES (3-6)**

Topics selected from the instructional technology field which are innovative and of immediate concern to existing instructional needs. Prerequisite: Bachelor's degree; may be repeated to a maximum of 6 credits with no topic repeated.

#### **ISTC 685 RESEARCH IN INSTRUCTIONAL TECHNOLOGY (3)**

Students write a research proposal and concentrate on elements of a research study, inferential statistics and research in the field of instructional technology. Prerequisite: 12 credits of ISTC courses at 600-700 level.

#### **ISTC 687 COMPUTER-BASED INSTRUCTION (3)**

The relationship between programmed instruction and computer-assisted instruction is examined. Students are required to demonstrate competencies in the design and production of computer-assisted instruction. Prerequisite: ISTC 541 or equivalent.

#### **ISTC 690 DATABASE APPLICATIONS FOR SCHOOL LIBRARY MEDIA CENTERS (3)**

Theories and applications of educational information system development, including database design and implementation and basis of graphical-user-interface (GUI) programming, with emphasis upon database applications for school library systems and administrative management. Prerequisite: ISTC 541/441 or ISTC 301/501 or equivalent.

#### **ISTC 691 DIRECTED READINGS IN INSTRUCTIONAL TECHNOLOGY (3)**

Independent readings and research in selected



areas of instructional technology. Prerequisite: Consent of chairperson.

**ISTC 695 INDEPENDENT STUDY IN INSTRUCTIONAL TECHNOLOGY (3)** Individual and supervised study of research problems and special projects in specific areas of instructional technology. Prerequisite: Consent of chairperson or instructor.

**ISTC 700 ASSESSMENT IN INSTRUCTIONAL TECHNOLOGY (3)** Contemporary theories and methodologies of assessment in instructional technology, including terminology and concepts, measurement principles and assessment instruments, with emphasis upon assessment of technology learning, technology integration, technology attitudes, performance, educational software designs and management of technology resource. Prerequisites: ISTC 685, ISTC 667.

**ISTC 702 EDUCATIONAL LEADERSHIP AND TECHNOLOGY (3)** Explores current research and theory related to technology policy, planning and leadership in education settings. Focus will include development of technology plans at the school district and state levels. Prerequisite: ISTC 301/501 or ISTC 541.

**ISTC 789 GRADUATE PRACTICUM IN INSTRUCTIONAL TECHNOLOGY (3-6)** Work in a school media center under professional supervision. Satisfies practicum requirements for certification as a media specialist or media generalist. Prerequisite: ISTC 471, ISTC 473, ISTC 601 and 15 additional credits in instructional technology.

**ISTC 797 GRADUATE INTERNSHIP IN INSTRUCTIONAL TECHNOLOGY (3)** Project under the direction of a faculty adviser. The course may be taken twice for credit. Prerequisite: 12 credits of ISTC courses at 600-700 level and consent of program director.

**ISTC 898 MASTER'S THESIS IN INSTRUCTIONAL TECHNOLOGY (6)** An original investigation, using research method

and design, of a research problem. Credit granted after thesis accepted. Prerequisite: Consent of chairperson.

**ISTC 899 THESIS CONTINUUM (1)**

## KINESIOLOGY (KNES)

**KNES 509 STRESS MANAGEMENT, TENSION CONTROL AND HUMAN PERFORMANCE (3)** Presents information about the manifestation of stress and systematic programs for tension control. The correlates surrounding progressive muscle relaxation and biofeedback are explored in detail as well as the neurological responses which produce tension responses. Lectures are combined with laboratory experiences in an effort to understand and practice relaxation techniques. Prerequisite: One psychology and/or biological science course.

**KNES 515 ADVANCED CARE AND PREVENTION OF ATHLETIC INJURIES (3)** Care and treatment of athletic injuries not covered in PHEC 315; fitting and evaluation of protective equipment; drugs in athletics and the use of physical therapy modalities. Prerequisite: PHEC 315 or equivalent or consent of instructor.

**KNES 523 ADAPTIVE PHYSICAL EDUCATION (3)** Recognition of pupils with physical deviations and use of special or modified physical education activities. Prerequisite: PHEC 311 and BIOL 213/214.

**KNES 526 MOTOR DEVELOPMENT: INFANTS TO ADULTS (3)** Researching of literature in motor development and performance of the individual from infancy through adulthood. Impact of motor development on cognitive, affective and psychomotor development. Prerequisite: PSYC 201.

**KNES 530 MOVEMENT EDUCATION IN THE ELEMENTARY SCHOOL (3)** Application of problem solving and individualized methods of teaching of movement for the

elementary school child. Development of program and materials for teaching creative dance, games and sports. Survey of current literature.

**KNES 535 PROGRAMS IN OUTDOOR EDUCATION (3)** Examines the varied programs in outdoor education offered within the state, nation and selected foreign countries. Traditional and innovative programs will be reviewed. Concepts will be contrasted and analyzed for meeting educational objectives. Several field trips are required. Open to education majors. Prerequisite: 6 credits of physical education, recreation or education. Graduates: Degree in physical education.

**KNES 541 THE AMERICAN WOMAN IN SPORT (3)** Historical, physiological, psychological, sociological and philosophical perspectives and societal attitudes toward women who participate in sport. Prerequisite: PSYC 101, SOCI 101 or WMST 231.

**KNES 551 HISTORY OF AMERICAN SPORT (3)** Explores sport in American society from a historical perspective. It includes major patterns of growth and the role of sports in American society. Emphasis is on methods of historical research and critical analysis of the discipline of sport history. Prerequisite: PHEC 299 or consent of instructor.

**KNES 555 PHYSICAL ACTIVITY PROGRAMMING FOR THE OLDER ADULT (3)** Application of physiological, psychological, sociological and motor learning principles to the development, professional and personal skills related to fitness assessment, exercise prescription, physical activity program planning and implementation. Prerequisite: PSYC 203 or consent of instructor.

**KNES 570-579 SELECTED TOPICS IN PHYSICAL EDUCATION (1-3)** Workshop designed for study of special topics of current interest in physical education and athletics. Content varies and will focus on substantive material or operational problems. May be repeated for a maximum of 6 credits. Prerequisite:

Consent of workshop director and/or graduate program director.

**KNES 594 TRAVEL STUDY (3)** Study of selected physical education programs, practices or facilities. Study group will be accompanied by a TU physical education department faculty member. Prerequisite: As specified in course outline and consent of instructor.

**KNES 596 INDEPENDENT STUDY (1-3)** Course is designed to permit students to take courses which they cannot arrange within the regular semester schedule. All work will be under the direct supervision of an assigned faculty member. No more than 3 credits may be earned in independent study unless permission of the department chairperson is obtained.

**KNES 609 PSYCHOLOGY OF MOTOR LEARNING (3)** Psychological factors affecting the acquisition of motor skills, emphasis on methodology. Prerequisite: Undergraduate degree in physical education and consent of graduate program director.

**KNES 611 SPORT PSYCHOLOGY (3)** A data-based analysis of the behavioral consequences and antecedents of the sport experience. Investigation of current research in the field with attention to the research process. Experience with a research experiment in either a laboratory or field setting. Prerequisite: 6 credits of upper-division PHEC courses or consent of instructor.

**KNES 612 SIGNIFICANT PERIODS IN PHYSICAL EDUCATION (3)** Influence of Greek, Roman, European and English concepts of physical education upon the formation and development of American concepts of physical education. Prerequisite: Undergraduate degree in physical education and consent of graduate program director.

**KNES 613 ANALYSIS OF PHYSIOLOGICAL CONCEPTS (3)** Analysis of research and laboratory application of the physiological factors that affect human efficiency before, during and after exercise, such as:

metabolism, circulation-respiration, muscular physiology, endocrine system, ergogenic aids and environmental factors. Prerequisite: Undergraduate degree in physical education and consent of graduate program director.

**KNES 614 ANALYSIS OF TEACHING BEHAVIOR IN PHYSICAL EDUCATION (3)** Review of research on teaching; analysis of components of the instructional process and the development of systematic observation and analysis of instruction. Prerequisite: Certification as a physical education teacher or appropriate experience in the field as determined by the program director.

**KNES 621 EDUCATIONAL GYMNAS-TICS (3)** Theoretical and historical basis for problem solving and individualized methods in teaching gymnastic movement. Prerequisite: Undergraduate major in physical education and consent of graduate program director.

**KNES 630 MECHANICAL ANALYSIS OF MOVEMENT (3)** Research and mechanical principles are analyzed relating to efficient human movement. Physical laws of leverage, motion, projectiles, gravity, buoyancy and equilibrium. Prerequisite: PHEC 311, undergraduate degree in physical education, consent of graduate program director.

**KNES 633 ADMINISTRATION AND SUPERVISION OF PHYSICAL EDUCATION (3)** Administration and supervision of programs of physical education. Problems of personnel, programs, facilities and evaluation. Prerequisite: Undergraduate degree in physical education and consent of graduate program director.

**KNES 639 CRITICAL ANALYSIS OF CURRENT LITERATURE IN PHYSICAL EDUCATION (3)** Investigation and assessment of the physical education profession: contemporary leaders, books, journals, periodicals, projects, trends, issues and innovations. Pre-

requisites: Undergraduate degree in physical education and consent of graduate program director.

**KNES 641 EVALUATIVE TECHNIQUES IN PHYSICAL EDUCATION (3)** Administration, assessment and interpretation of measurements of classification indexes: power, agility, balance, flexibility, kinesthetic perception, speed and reaction time, strength, muscular endurance, cardiovascular conditions and sport skills. Prerequisite: Undergraduate degree in physical education and consent of graduate program director.

**KNES 645 FACILITIES AND EQUIPMENT FOR PHYSICAL EDUCATION (3)** Principles of programming and planning facilities for physical education. Selection, purchase and care for equipment. Prerequisite: Undergraduate degree in physical education and consent of graduate program director.

**KNES 651 COMPARATIVE PHYSICAL EDUCATION - CONTEMPORARY AND INTERNATIONAL (3)** Analysis of patterns of physical education in selected countries throughout the world. Prerequisite: Undergraduate major in physical education and consent of graduate program director.

**KNES 653 CONTEMPORARY PHYSICAL EDUCATION CURRICULUM (3)** Aims, objectives, content and methods in curriculum design for elementary and secondary school physical education. Prerequisite: Undergraduate degree in physical education and consent of graduate program director.

**KNES 661 OUTDOOR LEISURE (3)** Man and leisure in a changing society and the impact on the natural environment. Development of outdoor recreation and adventure skill interest, teaching and leadership techniques. Prerequisite: Undergraduate degree in physical education and consent of graduate program director.

**KNES 663 CAMP ADMINISTRATION AND OUTDOOR EDUCATION (3)** Organization and structure, personnel, program, site development, business management, food management, health and safety, public relations and evaluation in the modern outdoor education center or camp. Prerequisite: B.S. degree in recreation, physical education or education.

**KNES 670-672 SELECTED TOPICS IN PHYSICAL EDUCATION (1-3)** Course will focus on an in-depth study of selected topics in sport and physical education. Content will vary and will focus on current research and/or relevant sport and physical education concerns. The specific requirements will vary with each topic. Prerequisite: Approval by the graduate program director.

**KNES 685 RESEARCH SEMINAR (3)** Research on a problem through consultation with designated faculty members. Prerequisites: EDUC 691, undergraduate degree in physical education and consent of graduate program director.

**KNES 687 INTERNSHIP IN PHYSICAL EDUCATION (3)** Supervised field experience appropriate to student's interests and background in selected school, business, agency or professional settings. Prerequisite: Minimum of 9 credits completed in graduate program, with a 3.00 G.P.A. and/or consent of department chairperson.

**KNES 696 INDEPENDENT STUDY IN PHYSICAL EDUCATION (3)** Supervised study of research problems and special projects in specified areas of physical education. Prerequisite: KNES 639 or KNES 641 and consent of graduate program director.

**KNES 697 DIRECTED READING IN PHYSICAL EDUCATION (3)** Extensive reading in selected areas of physical education. Prerequisite: KNES 639 or KNES 641 and consent of graduate program director.

## LIBERAL AND PROFESSIONAL STUDIES

**LBPS 601 INTRODUCTORY SEMINAR IN LIBERAL STUDIES (3)** Introduction to academic research paradigms and their relation to critical issues in professional practice and communication. Must be taken with the first 9 credits of degree work. Prerequisite: Admission to liberal and professional studies program.

**LBPS 602 CULMINATING SEMINAR IN LIBERAL AND PROFESSIONAL STUDIES (3)** Development, implementation and documentation of a culminating project for students enrolled in the liberal and professional studies graduate program. Must be taken during last semester of degree work. Prerequisite: Admission to liberal and professional studies program.

**LBPS 695 INDEPENDENT STUDY IN LIBERAL AND PROFESSIONAL STUDIES (3)** Independent study under direction of graduate faculty member in area related to student's course of study. May be repeated for a maximum of 6 credits. Prerequisite: Admission to graduate program, LBPS 601 and approval by graduate program director.

## MANAGEMENT (MNGT)

**MNGT 561 TOTAL QUALITY MANAGEMENT (3)** Philosophy, principles and applications of TQM in business. Prerequisite: MNGT 363 and MNGT 365 or graduate standing.

**MNGT 601 ADMINISTRATIVE THEORY AND PRACTICE (3)** Development of a framework for understanding and managing for organizational effectiveness, including the traditional areas of planning, organizing, staffing, directing and controlling. Other topics include organizational behavior theory, alternate methods for decision making and current management issues. This course



is designed for students with no undergraduate exposure to management course work. Prerequisite: Graduate standing.

**MNGT 602 CONFLICT RESOLUTION IN COMMERCE AND INDUSTRY (3)** An exploration of the causes of conflict and various approaches to its resolution. Conflict at the interpersonal level as well as the organizational level is examined. The focus is on avoiding litigation and using alternative methods used in common disputes in a variety of industries. Prerequisite: MNGT 601 and admission to a graduate degree program.

**MNGT 603 HUMAN RESOURCE MANAGEMENT IN A GLOBAL ECONOMY (3)** Issues in managing human resources in companies operating both domestically and globally including functions required by law and the marketplace. Prerequisite: Admission to a graduate degree program.

**MNGT 604 LABOR RELATIONS (3)** The dynamics of labor and management relations, with emphasis on the significance of dealing with unions and the realities of the constraints that industrial relations place on the managerial decision-making process. Topics include the development and recognition of union and collective bargaining and its impact on wages, hours, working conditions, employee relations and health safety. Current problems and issues are addressed. Prerequisite: MNGT 603 or MNGT 381 and graduate standing.

**MNGT 605 DECISION SUPPORT SYSTEMS (3)** Systems view of decision making. Concepts of artificial intelligence as applied to decision making, e.g. knowledge, human problem-solving, knowledge engineering, reasoning and recognition, and uncertainty. Concepts of problem-solving models and model management. Concepts of idea management for group decision support. Prerequisite: Course(s) and/or work experience in information systems.

**MNGT 607 INFORMATION SYSTEMS MANAGEMENT (3)** Information resource

requirements and strategies of businesses including information objective and design aspects, computer-based systems, telecommunications and data networks, systems analysis and design, artificial intelligence and decision support systems. Prerequisite: Graduate standing.

**MNGT 608 PROJECT MANAGEMENT (3)** Project-management concepts, economic analysis and multiple-criteria evaluation methods. Organizational and work structure, technology structure, scheduling, budget, resource management and control. Computer support and software projects. Prerequisite: Undergraduate courses in quantitative techniques.

**MNGT 609 BUSINESS AND SOCIETY (3)** An integrated view of the interrelationships between managing responsibility in a complex environment and stakeholders (the firm's many publics); corporate social performance; values and ethics in management, including a process of moral reasoning for managers; business-government relations; crisis management and managing corporate social performance. Prerequisite: Graduate standing.

**MNGT 610 QUANTITATIVE METHODS IN DECISION MAKING (3)** Advanced quantitative techniques for solving management decision problems. Optimal and heuristic solution strategies for static and dynamic problems. Emphasis on computer applications and decision making. Prerequisite: Admission to graduate program.

**MNGT 611 ORGANIZATIONS IN A VIRTUAL WORLD (3)** Effects of virtual environments on organizational operations. Participants create Web-based business plans for either new organizations or for existing organizations expanding into a new market. Prerequisite: Graduate standing.

**MNGT 612 MULTINATIONAL MANAGEMENT OF INFORMATION TECHNOLOGY (3)** Information systems for multinational and international technologies.

Strategic dimensions and international competition. Systems development strategies. Managing international information. Prerequisite: Admission to graduate program in information technology or computer science.

**MNGT 613 APPLIED MANAGEMENT STATISTICS (3)** To provide students with an overview of the applications of statistical analysis to business decision making. Students will be exposed to statistical models, data warehousing, data mining and data models. Prerequisite: 3 credits of statistics.

**MNGT 614 SYSTEMS ENGINEERING MANAGEMENT (3)** Systems engineering process and design requirements, methods, tools, planning, organization, review and evaluation. Contracting for systems engineering and supplier management. Prerequisite: Admission to graduate program in information technology or computer science.

**MNGT 615 STRATEGIC MANAGEMENT (3)** Course focuses on analyzing and developing corporate strategy and plans, both short- and long-term. Case studies and research in real-world business situations involving multinational organizations are emphasized. Prerequisite: Graduate standing.

**MNGT 616 INFORMATION SYSTEMS APPLICATIONS (3)** Course is designed to provide students with the opportunity to undertake field study projects or obtain professional certification. Prerequisite: Admission to graduate program.

**MNGT 670-679 SPECIAL TOPICS IN MANAGEMENT (3)** Contemporary business issues as they affect management practice. Content varies with each topic. Prerequisite: Consent of instructor.

**MNGT 695 INDEPENDENT STUDY IN MANAGEMENT (3)** Comprehensive paper on special topic in human resource management, organizational behavior or management. Prerequisite: 6 graduate credits in business and consent of instructor.

## MARKETING (MKTG)

**MKTG 602 CONSUMER BEHAVIOR (3)** Analyzing the buyer decision-making process, and the influences upon it made by external and specific situational factors. Prerequisite: Admission to a graduate degree program or consent of the instructor.

**MKTG 603 MARKETING ADMINISTRATION (3)** The fundamental aspects of marketing functions, theory and strategy, including analysis of marketing opportunities; marketing research and forecasting; market segmentation; consumer motivation; product planning, price and distribution; sales force management and the role of marketing within the firm and society. Prerequisite: Graduate standing.

**MKTG 604 GLOBAL MARKETING (3)** Understanding international and global factors that impact marketing strategy and implementation. Prerequisite: Admission to a graduate degree program or consent of the instructor.

**MKTG 605 STRATEGIC MARKETING MANAGEMENT (3)** Management of an organization's marketing activities and their strategic ramifications. Prerequisite: Admission to a graduate degree program or consent of the instructor.

**MKTG 607 MARKETING RESEARCH (3)** Research methodology and the strategic implications of research. Prerequisite: Graduate standing.

**MKTG 609 ADVERTISING MANAGEMENT (3)** Management of an organization's promotional strategies, including advertising research and advertising campaign development. Prerequisite: Graduate standing.

## MASS COMMUNICATION (MCOM)

**MCOM 502 LITERARY JOURNALISM (3)** Literary techniques and dramatic structure

for print and online journalistic media. Prerequisite: MCOM 356.

#### **MCOM 507 WRITING FOR NEW MEDIA**

(3) Research and create multimedia news and feature articles incorporating hypertext and graphics and photographic, audio and video elements. Prerequisite: MCOM 356, MCOM 357 or MCOM 381 and consent of instructor.

**MCOM 533 MEDIA ETHICS** (3) Ethical principles, issues, dilemmas in mass communication; professional codes; interpersonal, small group, organizational and societal factors affecting mediated communication. Prerequisite: Junior, senior or graduate student standing.

#### **MCOM 547 ADVERTISING CAMPAIGNS**

(3) Application of advertising principles and practices to the development of campaigns and the preparation of plan books. Prerequisite: MCOM 325.

#### **MCOM 550 PUBLIC OPINION AND THE PRESS**

(3) Journalistic aspects of public opinion and propaganda; the impact of mass communication media on the formation of public opinion. Techniques of polling and testing public opinion.

#### **MCOM 551 PUBLIC RELATIONS FOR NONPROFIT ORGANIZATIONS**

(3) Fundraising and developing, implementing and evaluating public relation campaigns for nonprofit organizations. Practical experience in lab sessions. Prerequisite: MCOM 357.

#### **MCOM 553 PUBLIC RELATIONS CAMPAIGNS**

(3) Strategies and case histories. Design of public relations programs for selected clients. Prerequisite: MCOM 253 and MCOM 357, one of which can be taken concurrently with MCOM 553.

#### **MCOM 559 PROFESSIONAL ISSUES IN PUBLIC RELATIONS, ADVERTISING AND INTEGRATED COMMUNICATIONS**

(3) Technical, managerial, legal and ethical issues, emphasizing accreditation

standards of professional associations. Prerequisite: COMM 419, MCOM 453 or MCOM 447.

#### **MCOM 572 INTERNATIONAL ADVERTISING**

(3) Role of advertising and promotion programs in the world marketplace, consideration of global and local perspectives, key decisions in agency operations, creative aspects and media. Prerequisite: MCOM 360.

#### **MCOM 601 MEDIA WRITING**

(3) Study of and practice in media-writing techniques. Emphasis on style, structure, content and purpose. Prerequisite: MCOM 255, or MCOM 356, or undergraduate degree in mass communication.

#### **MCOM 603 CRITICISM IN MASS MEDIA**

(3) Critical analysis of film and television with focus upon cultural, commercial and aesthetic values that affect these media. Prerequisite: MCOM 352, or MCOM 385 or equivalent.

#### **MCOM 605 THEORY AND PRACTICE OF PUBLIC RELATIONS AND ORGANIZATIONAL COMMUNICATION**

(3) Examines the body of knowledge in public relations, with a focus on the strategic management of communication, including case studies and field investigations. Prerequisite: MCOM 553 or equivalent, or consent of instructor.

#### **MCOM 613 FREELANCE FEATURE WRITING**

(3) Process of freelance writing for the print media. Prerequisite: MCOM 601 (may not be taken by those who have had WRIT 713).

#### **MCOM 615 ADMINISTRATIVE AND PROFESSIONAL COMMUNICATION**

(3) Practices and problems within business and corporations, with emphasis on management-employee effectiveness, conflict management and resolution and business communication formats. Prerequisite: MCOM 315 or equivalent.

**MCOM 617 INTERNATIONAL COMMUNICATION (3)** Media systems of the world compared relative to their political, cultural, sociological, economic, religious, historical and broadcasting and print structures. In-depth analysis of American global media efforts. Prerequisite: MCOM 255 or instructor's consent.

**MCOM 621 MASS MEDIA LAW AND REGULATIONS (3)** Legal limits on freedom of the press, Constitutional guarantees, libel, contempt, obscenity, privacy, ethical problems and the right to know. Origins and concepts of freedom of information and its evolution in Constitutional law and judicial decisions: contemporary problems of censorship in publishing, broadcasting and film.

**MCOM 625 WRITING FOR THE VISUAL MEDIA (3)** Scriptwriting for film, television and related media. Prerequisite: MCOM 601.

**MCOM 631 RESEARCH METHODS IN MASS COMMUNICATION (3)** Development of quantitative and qualitative communication research designs. Prerequisite: PSYC 212, or Math 231 or equivalent.

**MCOM 633 THEORIES IN MASS COMMUNICATION (3)** Understanding the communicator, message, channel, audience and effects as components of mass communication. Prerequisite: MCOM 411.

**MCOM 635 JOURNALISM ETHICS (3)** Study of historical and contemporary ethical practices of American journalism. Prerequisite: MCOM 385 or equivalent.

**MCOM 651 MEDIA AND POLITICS (3)** Relationships between the mass media and the political system. The influence of the media on political careers, the adversarial and support roles of the media. Prerequisite: MCOM 352, or MCOM 385 or equivalent.

**MCOM 670-673 SPECIAL TOPICS IN MASS COMMUNICATION (3)** Explo-

ration of current media topics. Prerequisite: Varies with each topic.

**MCOM 680 SEMINAR IN MEDIA MANAGEMENT: ELECTRONIC MEDIA MANAGEMENT AND OPERATIONS (3)** Functions, advertising, network and labor relations, internal organizational structure and operational procedures of broadcast management. Philosophies and theories of management, programming, audience research, budgeting and accounting principles, sales and regulatory functions. Prerequisite: MCOM 140, MCOM 265, or MCOM 271 or equivalent.

**MCOM 682 ISSUES MANAGEMENT (3)** Analysis of strategies used by organizations debating public policy. Prerequisites: MCOM 601 and MCOM 615.

**MCOM 685 MANAGING STRATEGIC PUBLIC RELATIONS AND INTEGRATED COMMUNICATIONS CAMPAIGNS (3)** Best practices in presenting, managing, planning, implementing and evaluating campaigns. Prerequisites: MCOM 605, MNGT 601, MKTG 603.

**MCOM 686 SEMINAR IN MEDIA PRODUCTION: TELEVISION (3)** Aesthetic and technical aspects of multi-camera television studio production: camera operation and techniques, lighting and audio technical direction and producing. Prerequisite: MCOM 271.

**MCOM 687 SEMINAR IN MEDIA PRODUCTION: NEWSPAPERS (3)** Newspaper production and its relationship to other aspects of its operation. Traditional and new newspaper technology. Prerequisite: MCOM 601.

**MCOM 688 SEMINAR IN MEDIA PRODUCTION: FILM (3)** The examination of advanced 16mm filmmaking practice in both pre-production and post-production leading to the completion of a professional quality 16mm release print. Individual cost to the



student will be determined by the selected student project. Prerequisite: MCOM 367 or equivalent.

**MCOM 701 MEDIA INTERRELATIONSHIPS (3)** Examination of the interactions among the mass media, including message-media systems. Prerequisite: MCOM 601.

**MCOM 715 SPECIALIZED REPORTING (3)** Developing expertise in the reporting of news in specific fields: e.g., urban affairs, science, the arts. Prerequisite: MCOM 601.

**MCOM 717 INTERNATIONAL FILM AND TELEVISION (3)** Examination of economic, social aesthetic and technological policies and issues. Current historical examples will be used. Prerequisite: MCOM 617.

**MCOM 781 INTERNSHIP IN JOURNALISM (3)** Supervised work in a professional journalistic setting. Prerequisite: MCOM 601; 6 additional MCOM graduate credits and consent of instructor.

**MCOM 783 INTERNSHIP IN PUBLIC RELATIONS (3)** Supervised work in a professional public relations setting. Opportunity to relate theory and practice. Prerequisite: MCOM 685 or equivalent; 6 additional MCOM graduate credits and consent of instructor.

**MCOM 785 INTERNSHIP IN FILM (3)** Supervised work experience within a professional filmmaking environment, exposing student to film production and scheduling. Prerequisites: MCOM 688 or equivalent; 6 additional MCOM graduate credits and consent of instructor.

**MCOM 787 INTERNSHIP IN ELECTRONIC MEDIA (3)** Supervised work in a professional electronic media setting. Prerequisites: MCOM 686 or equivalent; 6 additional MCOM graduate credits and consent of instructor.

**MCOM 795 INDEPENDENT STUDY IN MASS COMMUNICATION (3)** Directed study in production or research in selected areas through readings, projects, papers and/or seminars. May be repeated for a maximum of 6 credits. Prerequisites: 15 credits of graduate-level mass communication and/or communication studies courses, and consent of instructor.

**MCOM 897 GRADUATE PROJECT IN MASS COMMUNICATION (3-6)** Individual preparation and presentation of a project that applies theories and techniques in mass communication. Project must be approved, monitored and evaluated by a graduate faculty committee. Prerequisite: Completion of all core requirements, advancement to candidacy, and consent of instructor.

**MCOM 898 THESIS (6)** A carefully executed and accurate recording of a specific topic in mass communication. An acceptable research methodology must be used. Includes an outline of the proposed thesis submitted for approval to graduate adviser. Prerequisite: The student must be advanced to degree candidacy and have completed all of the required core courses.

**MCOM 899 THESIS CONTINUUM (1)**

## MATHEMATICS (MATH)

**MATH 363 MATHEMATICAL STRUCTURES FOR COMPUTER SCIENCE (4)** This course covers basic mathematical concepts utilized in computer science: proof techniques, propositional and predicate logic, elements of combinatorics, discrete probability, basic number theory, sequences and series, elements of the theory of computation. Prerequisite: Permit required from computer science; restricted to COSC graduate students.

**MATH 501 HISTORY OF MATHEMATICS (3)** Development of mathematics empha-

sizing mathematical concepts and contributions of individuals and societies. Prerequisites: MATH 263 and MATH 274.

**MATH 521 APPLICATIONS OF MATHEMATICS FOR SECONDARY SCHOOL TEACHERS (3)** The course examines a series of applications of mathematics that may be used to enrich the secondary mathematics curriculum. Prerequisite: Teaching experience in mathematics or science, or consent of instructor.

**MATH 525 METHODS AND MATERIALS FOR MATH LAB INSTRUCTION (1-3)** Examination of, and experiences with, commercial and teacher-made materials designed for a laboratory (activity-centered) approach to learning mathematics. Prerequisite: A methods course in teaching mathematics (MATH 321, 323, 423) or previous teaching experience.

**MATH 527 READINGS IN MATHEMATICS EDUCATION FOR THE ELEMENTARY SCHOOL TEACHER (1-3)** Directed study for the teacher of elementary school mathematics. Prerequisite: MATH 321 or MATH 323 and approval of instructor.

**MATH 529 READINGS IN MATHEMATICS EDUCATION FOR THE SECONDARY SCHOOL TEACHER (1-3)** Directed study for the teacher of secondary school mathematics. Prerequisite: Consent of instructor.

**MATH 531 PROBABILITY (3)** Probability in sample spaces, discrete and continuous random variables, distribution theory. Tchebyshev's theorem, central limit theorem, expected values and moments. Prerequisite: MATH 274.

**MATH 532 MATHEMATICAL STATISTICS (3)** Sample theory and distributions, point estimation, confidence intervals, tests of hypotheses, regression, correlation and analysis of variance. Prerequisite: MATH 331.

**MATH 533 APPLIED REGRESSION AND CORRELATION ANALYSIS (3)** Relationships among variables emphasizing linear regression with one or more independent variables, methods of estimating parameters and testing hypotheses, selection of independent variables and other topics. Prerequisite: One course in elementary statistics.

**MATH 534 NONPARAMETRIC STATISTICAL METHODS (3)** Applied study of popular nonparametric tests, procedures utilizing data from a single sample and two or more independent and related samples; Chi-square tests of independence, homogeneity and goodness-of-fit; rank correlation and other measures of association. Prerequisite: One course in elementary statistics.

**MATH 535 NUMERICAL ANALYSIS I (3)** Error analysis, interpolation, numerical differentiation and integration, numerical solution of algebraic equations and of systems of algebraic equations. Prerequisites: MATH 265, MATH 274 and COSC 236.

**MATH 536 NUMERICAL ANALYSIS II (3)** Numerical solution of differential equations. Least square and its applications, linear programming and extension of the concepts of MATH 435. Prerequisite: MATH 435 (offered only in the spring semester of the academic year).

**MATH 537 OPERATIONS RESEARCH (4)** Introduction to linear and integer programming; the simplex method and duality theory; dynamical formulation of deterministic decision-process problems, applications to problems of equipment replacement, resource allocation and scheduling; Poisson and birth and death processes. Markovian queues. Prerequisites: MATH 265 and MATH 331.

**MATH 538 LIFE CONTINGENCIES I (3)** Theory and applications of contingency mathematics in the areas of life and health insurance, annuities and pensions from both the probabilistic and deterministic approaches. Prerequisite: MATH 331.

**MATH 543 APPLIED ANALYSIS OF VARIANCE (3)** Single and multifactor models, inference for factor level means, multiple comparison methods for factor level means, test of additivity, test of homogeneity, regression approach to analysis of variance. Prerequisite: MATH 333.

**MATH 545 SAMPLING TECHNIQUES (3)** Simple random, stratified, systematic, cluster and double sampling. Sampling for proportions, averages and totals and sample size determination. Prerequisite: One course in elementary statistics.

**MATH 546 STATISTICAL METHODS IN QUALITY CONTROL (3)** Statistical process control including principles of control charts, control charts for attributes and variables and special control charts; methods for quality improvement. Acceptance sampling including single, double, multiple and sequential attribute sampling and acceptance sampling by variable. Prerequisite: One course in elementary statistics.

**MATH 551 GRAPH THEORY (3)** Hamiltonian and Eulerian graphs, coloring graphs, planar and non-planar graphs, connectivity problems and isomorphic graphs and advanced topics. Prerequisite: MATH 265 or MATH 267.

**MATH 557 DIFFERENTIAL GEOMETRY (3)** Curvatures of curves and surfaces in  $E^3$ , geodesics, invariants, mappings and special surfaces. Prerequisite: MATH 275.

**MATH 563 LINEAR ALGEBRA (3)** Vector spaces over arbitrary fields, linear transformations, eigenvalues, eigenvectors, inner products, bilinear forms, direct sum decompositions and the Jordan form. Prerequisite: MATH 265 and MATH 267.

**MATH 567 THEORY OF NUMBERS (3)** Theory of prime numbers, the division algorithm, the fundamental theorem of arithmetic, polynomials, congruences, number

theoretic functions. Prerequisite: MATH 261 or MATH 263.

**MATH 568 ALGEBRAIC STRUCTURES (4)** Groups, rings, fields, integral domains and polynomial rings. Prerequisites: MATH 265 and MATH 267.

**MATH 574 DIFFERENTIAL EQUATIONS (3)** Theory and application of linear ordinary differential equations. Solutions of nonlinear ordinary differential equations of the first order. Prerequisite: MATH 274.

**MATH 575 MATHEMATICAL MODELS (3)** Consideration of some mathematical problems in sociology, psychology, economics, management science and ecology, and developing appropriate mathematical models and techniques to solve them.

**MATH 576 INTRODUCTORY REAL ANALYSIS (4)** Introduction to mathematical analysis. Sequence series, continuity, differentiation, integration and uniform convergence. Prerequisites: MATH 267 and MATH 275.

**MATH 577 COMPLEX ANALYSIS (4)** Complex number system, analytic functions, Cauchy's integral theorem and integral formula, Taylor and Laurent series, isolated singularities, Cauchy's residue theorem and conformal mappings. Prerequisite: MATH 275.

**MATH 578 TOPOLOGY (3)** Basic concepts of pointset topology, separation axioms, compact and connected spaces, product and quotient spaces, convergence, continuity and homeomorphisms. Prerequisites: MATH 267 and MATH 275.

**MATH 579 ADVANCED CALCULUS (3)** Vector, integral and differential calculus including the divergence and Stoke's theorems. Fourier series, orthogonal functions and applications. Prerequisite: MATH 275.

**MATH 580-589 SELECTED TOPICS IN MATHEMATICS AND STATISTICS (1-4)** Topics will be chosen from different areas in mathematics and statistics. Content will be determined so as to complement course offerings, as well as the needs and desires of the students. (MATH 480 through MATH 483 may not be counted toward a mathematics major). Students may not accumulate more than 9 credits in Selected Topics. Prerequisite will vary from topic to topic.

**MATH 591 READINGS IN MATHEMATICS (1-3)** Independent readings in selected areas of mathematics. Prerequisite: Consent of instructor. May be repeated for a maximum of 6 credits.

**MATH 602 CULTURAL AND PHILOSOPHICAL BACKGROUND OF MATHEMATICS (3)** Meanings and origins of mathematical concepts, schools of philosophical thought, cultural and ethnomathematical context of mathematics, philosophy and purpose of mathematics education, current issues in mathematics and mathematics education, role of the mathematics teacher in current debates. Prerequisite: Admission to master's in Mathematics Education program.

**MATH 621 SEMINAR IN TEACHING ELEMENTARY AND MIDDLE SCHOOL MATHEMATICS (3)** Analysis of techniques and materials in elementary and middle school mathematics instruction and assessment. Student may not receive credit for both Math 621 and Math 422 except by special permission from the graduate program director and the chairperson of the mathematics department. Prerequisites: MATH 204, MATH 205, and MATH 251 or equivalent.

**MATH 625 SEMINAR IN MATHEMATICS EDUCATION FOR SECONDARY SCHOOL TEACHERS (3)** Investigations of recent curricula and research, pedagogy, materials, technology and assessment techniques for middle and high school teachers of mathematics. Prerequisite: MATH 423 or equivalent.

**MATH 626 TECHNOLOGY IN SCHOOL MATHEMATICS TEACHING AND LEARNING (3)** History and use of technology in teaching mathematics in grades 6 through twelve. Students will use scientific and graphing calculators, computers and other devices such as the Calculator-Based Laboratory (CBL) to solve problems found in secondary mathematics curriculum and apply this knowledge in the teaching of mathematical concepts. Software such as Mathematica, MathCad and Geometer's Sketchpad will be studied and students will write lessons using one of these software packages. The use of the Internet and other technological resources to teach mathematics will also be studied. Prerequisite: Admission to the Graduate Program.

**MATH 627 CURRICULUM ISSUES IN SECONDARY SCHOOL MATHEMATICS (3)** Analyze secondary school mathematics curriculum development from a historical perspective and discuss past influences on current methodology. Distinguish current curriculum trends and design alternatives. Evaluate contemporary curriculum by assessing an existing text or program. Create a selected mathematics unit. Prerequisite: Math 625.

**MATH 630 STATISTICS - AN INTEGRATED APPROACH (4)** Theory and practices of basic statistical analysis and inference with emphasis on analyzing and solving real problems using statistics. Descriptive statistics, introduction to probability, sampling distributions, estimation, hypotheses testing, regression, correlation, nonparametric techniques and analysis of variance, and computer programming incorporated throughout. Prior knowledge of programming is not necessary. Prerequisite: MATH 274 (not open to students who have completed MATH 332).

**MATH 631 TOPICS IN PROBABILITY (3)** Review of basic probability theory, types of convergence and limit theorems, elementary stochastic processes. Markov chains, birth and death processes. Gaussian processes. Examples from engineering, physical and social



sciences, management and statistics. Prerequisite: MATH 331.

**MATH 632 COMPUTATIONAL STOCHASTIC MODELING (3)** Computing expectations and probabilities by conditioning. Markov chains: classification of states, limiting probabilities, gambler's ruin problems, algorithmic efficiency, branching process, time-variable Markov chains, continuous-time Markov chains, birth and death processes, Kolmogorov differential equations, uniformization. Renewal theory and its applications. Prerequisite: MATH 331, MATH 531, or consent of chairperson.

**MATH 633 QUEUING SYSTEMS (3)** Characterization and analysis of basic queuing systems, both single-server and multiple-server. The M/G/1 and G/M/m queuing systems. Multiserver with queuing, multiserver queuing rules, priority queues. Networks of queues: response time, routing, flow and congestion control. Manufacturing systems: capacity/inventory investment and scheduling. Prerequisites: MATH 331, MATH 531, or consent of chairperson.

**MATH 634 COMPUTATIONAL SPECTRAL ANALYSIS AND TIME SERIES (3)** Random processes, single and double exponential smoothing forecast methods, autoregressive moving average models, maximum likelihood estimation, minimum variance spectral estimation, maximum entropy, periodogram analysis. Computation of spectral estimates; the fast Fourier transform, Yule-Walker equations, Prony's method. Kalman and adaptive filtering. Mathematica or a similar software package will be used. Prerequisites: MATH 265 and MATH 332, or MATH 532, or consent of chairperson.

**MATH 635 APPLIED NUMERICAL ANALYSIS (3)** Approximating functions, numerical solution of ordinary differential equations, numerical solution of partial differential equations, selected topics in numerical linear algebra such as orthogonal factorizations and least-square problems, singular value decomposition and pseudo-inverse, the

Q-R algorithm of Francis for the eigenvalue problem. Mathematica or a similar software package will be used. Prerequisites: MATH 374 or MATH 574, and MATH 435 or MATH 535, or consent of chairperson.

**MATH 636 LINEAR AND NONLINEAR PROGRAMMING (3)** Formulations and model building in linear and nonlinear programming. The simplex method and its variants. Duality theory. Sensitivity analysis, parametric programming, convergence (theoretical and practical). Polynomial time algorithms. Optimality conditions for nonlinear optimization problems. Prerequisite: MATH 265, MATH 275 and graduate standing, or consent of chairperson.

**MATH 637 ADVANCED TOPICS IN APPLIED OPERATIONS RESEARCH (3)** Dynamic programming, formulation of deterministic decision-process problems, analytic and computational methods of solution, application to problems of equipment replacement, resource allocation, scheduling, search and routing. Brief introduction to decision making under risk and uncertainty. Prerequisites: MATH 275 and MATH 331, or MATH 531, or consent of chairperson.

**MATH 651 MATHEMATICS OF FUZZY LOGIC (3)** Basic concepts of fuzzy logic, fuzzy sets, fuzzy uncertainty, fuzzy relations, comparing fuzzy logic with first-order predicate logic, algebra of fuzzy logic, approximate reasoning, rule-based systems. Description of linguistic data using fuzzy sets. Applications: rule-based expert systems, decision making, pattern recognition, control theory, optimization. Prerequisite: Graduate standing or consent of chairperson.

**MATH 653 TOPICS IN GEOMETRY (3)** Axiomatic development of Euclidean, elliptic and hyperbolic geometries; the study of the analytic plane, the sphere and the Poincare model as models for these axiomatic systems. Not open to students who have had MATH 353. Prerequisites: MATH 274 and MATH 467 (or MATH 568).

**MATH 671 CHAOTIC DYNAMICS AND FRACTAL GEOMETRY (3)** Introduction to the classical theory of linear systems and the modern theory of nonlinear and chaotic systems. Modeling of discrete and continuous time systems. Bifurcation theory, symbolic dynamics, fractals and complex dynamics, Julia sets and the Mandelbrot set. Mathematica or an equivalent software package will be used. Prerequisites: MATH 265 and MATH 275, and graduate standing or consent of chairperson.

**MATH 673 APPLIED INDUSTRIAL MATHEMATICS I (3)** Formulation and solution of mathematical problems for systems from engineering, economics, physics and the social sciences. Integral equations: theory, solutions and approximations. Integral transforms and their applications: Fourier, Mellin, Hankel, Hilbert, Radon and the z-transforms. Unitary transforms and their applications. Prerequisites: MATH 265 and MATH 374, or MATH 574; and MATH 379 or MATH 579; and MATH 475 or MATH 577; or consent of chairperson.

**MATH 674 APPLIED INDUSTRIAL MATHEMATICS II (3)** A continuation of MATH 673. Topics include: calculus of variations, introduction to partial differential equations, asymptotic expansions, introduction to the wavelet transforms and their numerical treatment. Mathematica or a similar software package will be used in the numerical approximation of the problems investigated. Prerequisite: MATH 673.

**MATH 677 ADVANCED MATHEMATICAL MODELING (3)** Development of appropriate stochastic as well as deterministic models to solve applied mathematical problems in the fields of physics, engineering, and the social sciences. Topics include optimization models, dynamic models, probability models and Monte Carlo simulation. Mathematica or a similar software package will be used. Prerequisites: MATH 331 or MATH 531, and MATH 379 or MATH 579, or consent of chairperson.

**MATH 695 INDEPENDENT STUDY IN MATHEMATICS (1-3)** Directed independent study in selected areas of graduate level mathematics. Prerequisite: Permission of instructor and graduate adviser.

**MATH 791-792 MASTER'S INTERNSHIP (3)** An original investigation of a problem to be pursued in cooperation with a local industry or business under the direction of an industry supervisor and a member of the mathematics faculty. Prerequisite: Completion of at least 15 credits toward the M.S. degree in applied and industrial mathematics and consent of chairperson.

**MATH 898 MASTER'S THESIS IN MATHEMATICS EDUCATION (6)** An original investigation using an acceptable research method and design conducted under the direction of one or more faculty members. Prerequisite: Department consent.

## **MUSIC (MUSC) - HISTORY/ LITERATURE, THEORY, COMPOSITION, SPECIAL TOPICS**

**MUSC 502 MUSIC OF THE BAROQUE PERIOD (3)** Study of the development of music style, forms and compositional techniques during the period from 1600 to about 1750. Prerequisite: MUSC 232 or consent of instructor.

**MUSC 503 MUSIC OF THE CLASSICAL PERIOD (3)** Styles, forms and techniques of the period from 1750-1820. Particular emphasis is placed on instrumental categories of the string quartet, sonata, symphony and concerto as illustrated in the works of Haydn, Mozart and Beethoven. Attention is given to operatic and sacred compositions of the same masters. Prerequisite: MUSC 232 or consent of instructor.

**MUSC 504 MUSIC OF THE ROMANTIC PERIOD (3)** Musical styles, forms and techniques in the 19th century with special attention to the intellectual foundations of the Ro-

mantic movement. Prerequisite: MUSC 232 or consent of instructor.

**MUSC 505 CONTEMPORARY MUSIC (3)** Styles, forms and musical techniques since 1900. Prerequisite: MUSC 302 or consent of instructor.

**MUSC 506 SURVEY OF SOLO VOICE LITERATURE (3)** A musical survey of the art song from circa 1750 to the present. Prerequisite: MUSC 232 or consent of instructor.

**MUSC 509 HISTORY AND LITERATURE OF GUITAR, LUTE AND VIHUELA (3)** A survey of the history and literature written for or readily adaptable to the guitar. Includes study of tablatures and transcriptions to modern notation. Prerequisite: MUSC 232 or consent of instructor.

**MUSC 511 SURVEY OF OPERA (3)** Study of opera literature of various periods and styles. Prerequisite: Junior or senior standing or consent of instructor.

**MUSC 513 SYMPHONIC LITERATURE (3)** Survey of orchestral music from the Classical Era to the present. Includes symphony, overture and symphonic poem. Prerequisite: MUSC 232 or consent of instructor.

**MUSC 514 COUNTERPOINT (3)** The study of counterpoint utilizing the principles of species counterpoint. Analysis of examples from all style periods and writing of counterpoint in all five species. Prerequisite: Completion of music theory sequence or graduate standing.

**MUSC 519 KEYBOARD LITERATURE (3)** The study of literature for keyboard instruments from 1450 to the present. Prerequisite: Upper-division or graduate standing as a music major, or permission of instructor.

**MUSC 520 JAZZ THEORY (3)** Study and practice of rhythms, harmonic and melodic dictation in jazz styles, the use of extended

chords and modal harmony in the jazz idiom. Prerequisites: MUSC 232 or consent of instructor.

**MUSC 521 AMERICAN MUSIC (3)** American music from the Colonial Period to the present. Prerequisite: Junior/senior standing or consent of instructor.

**MUSC 525 JAZZ REPERTOIRE (3)** Study and performance of standard jazz literature for small, varied instrumental groups or vocalists. Prerequisite: MUSC 232 or consent of instructor.

**MUSC 526 JAZZ HISTORY (3)** Survey of jazz from its origins to the present day. Prerequisite: MUSC 232.

**MUSC 527-528 JAZZ ARRANGING I, II (3, 3)** Study and practice of arranging of standard material for jazz ensembles. Prerequisite: MUSC 232 or consent of instructor.

**MUSC 529-530 JAZZ IMPROVISATION I, II (3, 3)** Study and practice of improvising in various jazz styles. Prerequisite: MUSC 231/232 or consent of instructor.

**MUSC 531 ADVANCED CHORAL AND INSTRUMENTAL ARRANGING (3)** Advanced arranging techniques including the scoring of original and other works for various combinations of instruments and/or voices. Prerequisite: MUSC 335, or equivalent, or consent of instructor.

**MUSC 537 ADVANCED COMPUTER APPLICATIONS IN MUSIC (3)** Creative use of computer applications: sequencing, notation, synthesis applications, digital music recording, editing, synchronization with film/video. Prerequisite: MUSC 135.

**MUSC 542 VOCAL PEDAGOGY (3)** Theory and practice of the teaching of singing by national styles, historical approaches and the physiology of the voice. Prerequisite: MUSC 245 and MUSC 246, or consent of instructor.

**MUSC 560 PIANO PEDAGOGY (3)** Teach the goals and steps in the art of teaching beginner, elementary and intermediate piano.

**MUSC 562 GUITAR PEDAGOGY (3)** Art and science of teaching guitar, historical and current practices, and observations. Private studio organization and administration. Prerequisite: 200-level guitar private lessons or consent of instructor.

**MUSC 571-579 SPECIAL TOPICS IN MUSIC (3)** Consideration of central topic in music with different topic each semester. May be repeated for credit. Prerequisite: MUSC 232 or consent of instructor.

**MUSC 593 INDEPENDENT RESEARCH IN MUSIC (1-3)** Supervised research in a selected topic in music culminating in an extended paper. May be repeated for credit. Prerequisite: MUSC 302 or consent of instructor.

**MUSC 597 INTERNSHIP IN MUSIC (1-6)** Field experience with working professionals. Prerequisite: Consent of music internship coordinator. S/U grading.

**MUSC 621 PERSPECTIVES IN MUSIC HISTORY (3)** An examination of important issues in the history of Western music, focusing on the philosophies of music historians, the evolution of pertinent genres and forms, the social background to musical practice and recent developments in musical scholarship. Prerequisite: Admission to master's program in music.

**MUSC 629 CONCEPTS OF MUSIC THEORY (3)** The theoretical and analytical principles of tonal music. Emphasis on writing and listening skills. Prerequisite: Graduate standing.

**MUSC 631 ADVANCED THEORY (3)** Continued development of skills in more advanced melodic, harmonic and rhythmic aspects of music through hearing, playing and writing. Prerequisite: MUSC 232.

**MUSC 670-679 SPECIAL TOPICS IN MUSIC (3)** In-depth study of a selected topic in music. Specific requirements and prerequisites will vary with each topic and will be designated by the department each time a topic is scheduled. Approval by the graduate adviser is required. Each topic may be taken as a separate course.

**MUSC 671 SPECIAL TOPICS IN MUSIC LITERATURE (3)** Consideration of a central topic of music literature with a different topic selected each semester. May be reelected. Prerequisite: MUSC 232 and consent of instructor.

**MUSC 685 MUSIC BIBLIOGRAPHY AND RESEARCH (3)** Investigation of music bibliography, research methodology and the writing process. Independent research projects and experience in writing research papers, reviews and essays in musical criticism.

**MUSC 797 GRADUATE RECITAL (1)** Recital performance for Master of Music graduation requirement. Prerequisite: A minimum of 24 credits completed toward the degree and permission of the graduate program director.

**MUSC 897 GRADUATE PROJECT IN MUSIC (1)** Fulfills a graduation requirement for Master of Science in music education. Projects include recital, composition, research paper or practicum as appropriate to the needs and interest of the student. Prerequisite: A minimum of 21 graduate credits completed and permission of the graduate program director in music education.

**MUSC 898 MASTER'S THESIS IN MUSIC (6)**

**MUSC 899 THESIS CONTINUUM (1)**



## MUSIC APPLIED (MUSA) - ENSEMBLES (1)

The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

### Vocal Ensembles

- MUSA 650 Choral Society (no audition required)
- MUSA 651 Chorale
- MUSA 652 Chamber Singers
- MUSA 653 Music for the Stage
- MUSA 654 Music Theater Chorus
- MUSA 668 Early Music Ensemble
- MUSC 684 Jazz Vocal Ensemble

### Large Instrumental Ensembles

- MUSA 660 Marching Band (no audition required)
- MUSA 661 Symphonic Band
- MUSA 662 Orchestra
- MUSA 663 Opera Orchestra
- MUSA 664 Music Theater Orchestra
- MUSA 665 Wind Ensemble

### Small Instrumental Ensembles

- MUSA 666 Woodwind Ensemble
- MUSA 667 Chamber Music Ensemble
- MUSA 668 Early Music Ensemble
- MUSA 669 Brass Ensemble
- MUSA 671 Clarinet Choir
- MUSA 672 Percussion Ensemble
- MUSA 673 Saxophone Ensemble
- MUSA 675 Guitar Ensemble

### Jazz Ensembles

- MUSA 681 Jazz Ensemble - Big Band
- MUSA 682 Jazz Ensemble - Combo
- MUSA 683 Jazz Ensemble - Guitar
- MUSA 684 Jazz Ensemble - Voice
- MUSA 685 Jazz Ensemble - Latin

## MUSIC APPLIED (MUSA) - PRIVATE LESSONS (1-3)

Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each semester. May be repeated for credit depending on concentration. Prerequisite: Audition and permission of the graduate program director. Special permit only.

Note: Additional fees apply. Contact the department for fee policy, 410-704-2836.

### Composition

- MUSA 600 COMPOSITION

### Vocal

- MUSA 603 VOICE

### Keyboard

- MUSA 605 PIANO
- MUSA 606 ORGAN
- MUSA 607 HARPSICHORD

### Percussion

- MUSA 610 SNARE DRUM
- MUSA 611 MALLETS
- MUSA 612 TIMPANI
- MUSA 613 MULTIPLE PERCUSSION

### Brass

- MUSA 620 TRUMPET
- MUSA 621 TROMBONE
- MUSA 622 FRENCH HORN
- MUSA 623 TUBA

### Woodwinds

- MUSA 625 FLUTE
- MUSA 626 CLARINET
- MUSA 627 OBOE
- MUSA 628 BASSOON
- MUSA 629 SAXOPHONE

**Strings**

MUSA 630	VIOLIN
MUSA 631	VIOLA
MUSA 632	CELLO
MUSA 633	STRING BASS
MUSA 634	HARP

**Guitar**

MUSA 635	CLASSICAL GUITAR
MUSA 636	OTHER FRETTED INSTRUMENTS

**Jazz/Commercial**

MUSA 640	JAZZ/COMMERCIAL GUITAR
MUSA 641	JAZZ/COMMERCIAL STRING BASS
MUSA 642	JAZZ/COMMERCIAL PIANO
MUSA 643	JAZZ/COMMERCIAL DRUMS
MUSA 644	JAZZ/COMMERCIAL TRUMPET
MUSA 645	JAZZ/COMMERCIAL SAXOPHONE
MUSA 646	JAZZ/COMMERCIAL TROMBONE
MUSA 647	JAZZ/COMMERCIAL ELECTRIC BASS
MUSA 648	JAZZ/COMMERCIAL VOICE

**MUSIC EDUCATION (MUED)**

**MUED 601 CURRENT TRENDS IN MUSIC AND MUSIC EDUCATION (3)** Current philosophies and objectives of music scope and sequence of music curricula (vocal and instrumental) in the schools. Prerequisite: Consent of department chairperson.

**MUED 603 MUSIC IN SPECIAL EDUCATION (3)** Musical curriculum materials and activities addressing the needs of handicapped students in school settings. Teacher skill development in adapting lesson plans, developing Individual Education Programs and program implementation. Prerequisite: MUED 307, MUED 309 or permission of chairperson.

**MUED 605 SEMINAR IN COMMUNITY MUSIC (3)** Exploration of the teaching and performance of music in diverse settings: community music schools, retirement communities, preschool/home school settings, workplace performance groups, intergenerational settings and community-based ensembles. Includes philosophy, pedagogy and practical issues such as funding, as well as aspects of adult and intergenerational learning. Prerequisite: Bachelor's degree in music or music education.

**MUED 617 CHORAL WORKSHOP IN ELEMENTARY AND SECONDARY SCHOOL MUSIC (2)** Observation, conducting and evaluation of rehearsals of the chorus made up of workshop participants. Includes sources and selection of music, audition and classification of voices, pedagogy, rehearsal techniques, choral arranging and program building and programming. Prerequisite: MUSC 327.

**MUED 630 DALCROZE-ORFF-KODALY FOR THE CLASSROOM I (2)** Principles of Dalcroze eurhythmics, Orff and Kodaly techniques in elementary and middle school programs. Appropriate for vocal-general and instrumental teachers. Prerequisite: Bachelor's degree in music or music education.

**MUED 631 DALCROZE-ORFF-KODALY FOR THE CLASSROOM II (2)** Principles of beginning and intermediate level Dalcroze, Orff and Kodaly techniques in the vocal-general and instrumental music program exploring practical techniques and materials using an eclectic approach to teaching concepts and skills. Prerequisite: MUED 630 or consent of instructor.

**MUED 632 DALCROZE PRACTICES (2)** Methods and materials incorporating eurhythmics, solfege, improvisation and basic keyboard improvisatory skills. Prerequisite: MUED 630 or consent of instructor.

**MUED 633 ORFF TECHNIQUES (2)** Methods and materials incorporating improvisation, orchestration, mallet technique,

speech chants, movement and use of Orff instruments. Prerequisite: MUED 630 or consent of instructor.

**MUED 634 KODALY TECHNIQUES (2)** Methods and materials incorporating sight singing exercises, rhythm and movement, folk songs and singing games within an eclectic curriculum. Prerequisite: MUED 630 or consent of instructor.

**MUED 635 THEORY, PEDAGOGY AND CURRICULUM DEVELOPMENT IN DALCROZE, ORFF, KODALY (3)** Teaching the pedagogy of musical elements and concepts using Dalcroze, Orff and Kodaly techniques and materials. Prerequisites: MUED 631, MUED 632 and MUED 633, MUED 634, or consent of instructor.

**MUED 639 ADVANCED WORKSHOP IN ELEMENTARY AND MIDDLE SCHOOL GENERAL MUSIC (2)** Observation, development and evaluation of current materials and methodology in elementary and middle school general music. Prerequisite: MUED 307, MUED 309 or equivalent.

**MUED 661 SEMINAR IN INSTRUMENTAL MUSIC (3)** Comparative analysis of current methods and materials used in schools and colleges. Instrumental conducting and repertoire. Construction of acoustical properties and basic techniques of instruments. Problems of ensemble and balance. Intonation, precision and interpretation are studied. Materials and music literature for bands, orchestras and small ensembles are evaluated. Prerequisite: Admission to graduate program.

**MUED 662 SEMINAR IN CHORAL (VOCAL) MUSIC (3)** Comparative analysis of current methods and materials used in schools and colleges. Choral conducting and repertoire. Style interpretation, tone quality, diction, rehearsal and conducting techniques are analyzed. Prerequisite: Consent of department chairperson.

**MUED 670-679 WORKSHOPS IN MUSIC EDUCATION (1-3)** Selected topics in music education. Can be repeated for credit when topics differ. Prerequisite: Graduate standing.

**MUED 695 RESEARCH METHODS IN MUSIC EDUCATION (3)** The application of research to problems in the field of music education. Prerequisite: Admission to the graduate program in music education and consent of instructor.

## NURSING (NURS)

**NURS 510 SPIRITUALITY, HEALTH and NURSING PRACTICE (3)** Application of theory and research to spiritual care of diverse client populations across the life span, and development of spiritual self-care plan of the provider. Prerequisites: One clinical course in nursing; RN status; or consent of the instructor.

**NURS 523 CRISIS AND STRESS MANAGEMENT (3)** An integrated, comprehensive, multicomponent approach to crisis intervention in a variety of individuals, groups and settings. Prerequisite: PSYC 101 or HLTH 101.

**NURS 594 TRAVEL STUDY IN NURSING (3)** Historical and contemporary sociopolitical factors that guide the delivery of health care to various population groups in other countries. Prerequisite: Permission of the instructor.

**NURS 601 THEORETICAL FOUNDATIONS OF NURSING PRACTICE (3)** Prepares nurses to critically analyze and apply a wide range of nursing and related theories to research and clinical practice in order to develop a comprehensive and holistic approach to care. Prerequisite: Consent of instructor.

**NURS 603 NURSING RESEARCH (3)** Prepares the nurse to identify clinical problems, critically evaluate nursing research, develop a research design, and apply research in prac-

tice. Prerequisites: undergraduate research and/or statistics course and consent of instructor.

**NURS 605 NURSING SYSTEMS IN HEALTH CARE (3)** Prepares the nurse to participate in the design, implementation and management of care in a variety of health care systems, provide quality cost-effective care, and assume a leadership role in the managing of human, fiscal, and physical health care resources. Prerequisite: Consent of instructor.

**NURS 610 CURRICULUM DEVELOPMENT IN NURSING (3)** Overview of theory and methods for the development of nursing educational delivery systems in academic and service settings. Prerequisite: ADED 585.

**NURS 612 TEACHING AND LEARNING IN NURSING (3)** Focuses on the application of learning theory and teaching methods in the classroom and clinical environments with a particular emphasis on meeting the needs of diverse student populations. Includes instructional technology and micro-teaching experiences. Prerequisites: ADED 585, NURS 610 (may be taken concurrently).

**NURS 700 COMMUNITY-BASED NURSING (3)** Focuses on application of epidemiological frameworks and concepts in health promotion, environmental health and disease prevention with diverse groups across the life span. Emphasis will be placed on the nursing care of at-risk and vulnerable populations in community-based settings. Prerequisites: IDHP 600, NURS 601.

**NURS 710 EVALUATION IN NURSING EDUCATION (3)** Emphasis is placed on the evaluation of student performance, teaching, courses and programs. Assessment measures of learner outcomes, faculty effectiveness and program quality will be explored. Prerequisites: ADED 585, NURS 610, NURS 612 (may be taken concurrently).

**NURS 800 ADVANCED COMMUNITY-BASED NURSING PRACTICE (3-6)** A clinical practicum designed to enhance the nurse's previous learning and experiences while fostering the development of new nursing knowledge and skills in community-based settings with diverse populations. Includes a weekly seminar. Prerequisite or Corequisite: NURS 700.

**NURS 810 TEACHING PRACTICUM (3)** A practicum designed to apply new knowledge and skills in teaching and learning in academic or service settings. Self-assessment of teaching, discussion of the nurse educator role, and exploration of issues related to the teaching-learning environment will occur in weekly seminars. Prerequisites: NURS 612, NURS 710 (may be taken concurrently).

**NURS 850 NURSING GRADUATE PROJECT (3)** Development and presentation of a scholarly and creative project that has significance for nursing and provides a capstone experience for the student. Prerequisite: Completion of nursing graduate work. (Optional)

**NURS 851 NURSING MASTERS THESIS (6)** Development and presentation of a scholarly research project that has significance for nursing and provides a capstone experience for the student. Prerequisite: Completion of nursing graduate work. (Optional)

## OCCUPATIONAL THERAPY (OCTH)

**OCTH 536 OCCUPATIONAL THERAPY INTERNSHIP II (6)** Supervised fieldwork in occupational therapy practice. Prerequisites: OCTH 325-326, OCTH 412. S/U grading.

**OCTH 570-579 SPECIAL TOPICS IN OCCUPATIONAL THERAPY (1-3)** Designed to explore topics of special interest in the theory and practice of occupational therapy. Prerequisite: Consent of instructor. May be repeated for a maximum of 3 credits.



**OCTH 601 THEORY AND PRACTICE OF PSYCHOSOCIAL OCCUPATIONAL THERAPY (3)** Psychosocial theories underlying the practice of occupational therapy; current and projected models of clinical practice. Prerequisite: Permission of instructor.

**OCTH 603 ISSUES IN OCCUPATIONAL THERAPY (3)** Analysis of current issues in occupational therapy. Prerequisite: Admission to occupational therapy master's program.

**OCTH 604 ACADEMIC AND CLINICAL EDUCATION (3)** College/university teaching and clinical supervision strategies for the preparation of professionals in clinical disciplines. Prerequisite: Consent of instructor.

**OCTH 605 MANAGING HUMAN RESOURCES IN OCCUPATIONAL THERAPY (3)** Issues and trends: in leadership, decision-making styles, productivity, professional development recruitment and retention, and performance appraisal systems. Prerequisite: Consent of instructor.

**OCTH 606 MANAGING OCCUPATIONAL THERAPY SERVICES (3)** Organizational principles and managerial strategies include quality assurance, financial management, third party reimbursement, marketing and strategic planning. Prerequisite: Consent of instructor.

**OCTH 611 ADVANCED THEORY AND PHILOSOPHY OF OCCUPATION (3)** Analysis of the theories and philosophical assumptions underlying occupation. Prerequisite: Consent of instructor.

**OCTH 613 ADVANCED RESEARCH METHODS IN OCCUPATION-BASED PRACTICE (3)** Application of qualitative and quantitative research. Prerequisite: Consent of instructor.

**OCTH 621 GERIATRIC REHABILITATION (3)** Older adult assessment and reha-

bilitation within a variety of health care systems. Prerequisite: Consent of instructor.

**OCTH 623 EVALUATION IN PEDIATRIC OCCUPATIONAL THERAPY (3)** Theory and practice of evaluation in the area of pediatric occupational therapy. Prerequisite: Consent of instructor.

**OCTH 625 ASSESSMENT AND TREATMENT OF THE ADULT WITH CENTRAL NERVOUS SYSTEM DYSFUNCTION (3)** Investigation of current theories of occupational therapy assessment and intervention strategies used in adult central nervous dysfunction. Prerequisites: OCTH 611 and OCTH 513, and consent of instructor.

**OCTH 627 ASSESSMENT AND TREATMENT OF THE ADULT WITH BIOMECHANICAL DYSFUNCTION (3)** Investigation of current theories of occupational therapy assessment and intervention strategies used in adult biomechanical dysfunction. Prerequisites: OCTH 611 and OCTH 613, and consent of instructor.

**OCTH 631 COMMUNITY GERONTOLOGY (3)** Planning and consulting for adult community programs. Prerequisite: Consent of instructor.

**OCTH 633 OCCUPATIONAL THERAPY TREATMENT IN PEDIATRICS (3)** Advanced treatment principles for developmental disabilities from the neurodevelopmental viewpoints, including provisions for care of children in health delivery systems, including the school. Prerequisite: OCTH 623.

**OCTH 670-679 SPECIAL TOPICS IN OCCUPATIONAL THERAPY (1-3)** Study of selected topics in occupational therapy. Prerequisite: Vary with each topic, consent of instructor.

**OCTH 691 DIRECTED READINGS IN OCCUPATIONAL THERAPY (1-3)** Guided review of literature to explore in-depth subjects related to occupational therapy theory

and practice. Prerequisite: Graduate standing.

**OCTH 781 GRADUATE SEMINAR IN OCCUPATIONAL THERAPY (3)** Graduate project of thesis proposal preparation with feedback and discussion. Prerequisite: Admission to occupational therapy master's degree program, PSYC 687 and consent of department.

**OCTH 791 INDEPENDENT STUDY (1-6)** In-depth investigation specific to area of concentration. Prerequisite: Admission to graduate program in occupational therapy and consent of instructor.

**OCTH 897 GRADUATE PROJECT IN OCCUPATIONAL THERAPY (3)** Implementation and documentation of a project designed in OCTH 781 that is oriented toward the application of specific techniques in occupational technology. Prerequisite: OCTH 781, successful completion of the graduate examination and consent of project adviser.

**OCTH 898 THESIS (6)** Original investigation using an acceptable research method and design conducted under the direction of a faculty member. Prerequisite: OCTH 781, successful completion of the graduate examination and consent of thesis chairperson.

**OCTH 899 THESIS CONTINUUM (1)**

## **PHILOSOPHY AND RELIGIOUS STUDIES (PHIL)**

**PHIL 501 PHILOSOPHIES OF INDIA (3)** Examination of major ideas in the Vedic, Epic, Classical darsana and modern periods. Prerequisite: One lower-level course in philosophy or consent of instructor.

**PHIL 502 PHILOSOPHIES OF CHINA AND JAPAN (3)** Examination of major philosophical systems through selected writings in translation. Prerequisite: One lower-level course in philosophy or consent of instructor.

**PHIL 509 AESTHETICS (3)** An analytical and historical examination of concepts of the nature of art, beauty, aesthetic value and aesthetic perception, and of the modes of existence of artifacts. Prerequisite: One lower-division course in philosophy.

**PHIL 511 ETHICS (3)** Analysis of readings from the principle classical and contemporary ethical sources, study of the basic moral concepts as found in these sources; application to contemporary moral concerns. Prerequisite: One lower-division course in philosophy.

**PHIL 513 PHENOMENOLOGY (3)** An examination of phenomenology as both a philosophical method and philosophical position. Themes to be considered include consciousness, the body, time and the experience of others. Primary course readings in the works of Husserl, Heidegger, Sartre, Merleau-Ponty. Prerequisite: 6 credits in philosophy.

**PHIL 517 EXISTENTIALISM (3)** Some of the major existentialist philosophers will be studied, e.g., Kierkegaard, Nietzsche, Heidegger, Sartre, Beauvoir. The philosophical themes of transcendence, the absurd, estrangement and anxiety will be considered. Prerequisite: 6 credits in philosophy.

**PHIL 522 HELLENISTIC AND MEDIEVAL PHILOSOPHY (3)** This course will deal with the philosophical schools of the Hellenistic and Roman periods, viz., Stoicism, Epicureanism, Scepticism and Neo-Platonism, and with the two main Christian philosophies of the Middle Ages, viz., Augustinianism and Thomism. Prerequisite: One lower-division course in philosophy.

**PHIL 524 MODERN PHILOSOPHY (3)** The history of philosophy, beginning with Descartes, through the 19th century. Prerequisite: One lower-division course in philosophy.

**PHIL 525 SCHOOLS OF CONTEMPORARY PHILOSOPHY (3)** A survey with

varying emphasis on a number of such contemporary philosophical positions as pragmatism, phenomenology, logical positivism, the analysts, neo-Aristotelianism, the philosophers of science and the existentialists. Prerequisite: One lower-division course in philosophy.

**PHIL 526 AMERICAN PHILOSOPHY (3)** History of the main currents of American philosophical thought as exemplified in such writers as Edwards, Emerson, Pierce, James, Royce, Dewey and Whitehead. Prerequisite: One lower-division course in philosophy.

**PHIL 531 CONCEPTS OF WOMAN: A HISTORICAL APPROACH (3)** Various concepts which philosophers have used to define women. A historical survey approach, with readings from Plato, Aquinas and others, and ending with Beauvoir. Prerequisite: One lower-division course in philosophy.

**PHIL 532 FEMINIST PHILOSOPHY (3)** Contemporary problems, including redefinition of traditional areas of philosophy and creation of new issues for investigation. Prerequisite: One lower-division philosophy course or consent of instructor.

**PHIL 539 THEORY OF KNOWLEDGE (3)** A historical and systematic approach to the truth, value and elements of the forms of human knowledge. The theories of major philosophers will be studied. Prerequisite: One lower-division course in philosophy.

**PHIL 540-549 PHILOSOPHICAL SYSTEMS (3)** The study of a major philosophical system or position, classical or modern, and its important proponents. Prerequisite: Two previous courses in philosophy.

**PHIL 551 PHILOSOPHY OF RELIGION (3)** Exposition of various approaches to the philosophy of religion with an analysis of the major issues on which they differ and agree. Prerequisite: Two previous courses in philosophy or religion.

**PHIL 555 INTERPRETATIONS OF THE BIBLE: NEW TESTAMENT (3)** Major themes of Biblical literature, and its religious, philosophical and cultural implications. Prerequisite: One lower-division course in philosophy or religion.

**PHIL 557 TOPICS IN COMPARATIVE RELIGION (3)** Study of a number of the world's major religious traditions emphasizing specific philosophical and psychological problems encountered therein. Prerequisite: At least one lower-division course in philosophy, religion or history.

**PHIL 561 ETHICS OF MEDICINE AND THE LIFE SCIENCES (3)** A search for guidelines in such moral problems as abortion, the care of the dying, organ transplants, informed consent in therapy and experimentation, adequate health care and its just distribution, control of human behavior by drugs, surgery, etc. Test-tube reproduction, population control, genetic engineering and counseling. Prerequisite: One lower-division course in philosophy or consent of instructor.

**PHIL 563 BUSINESS ETHICS (3)** Economics is one of the "moral sciences" in so far as it deals with an important sphere of human activity which intends a good. This course will institute a philosophical reflection on economic ideas as they appear in the three main categories of opinion, viz., conservative, liberal and radical. Attention will be drawn to the epistemological, ethical and metaphysical presuppositions of these traditions. Prerequisite: One lower-division course in philosophy.

**PHIL 570-579 PHILOSOPHICAL PROBLEMS (3)** A consideration of one of the perennial interests of philosophy. Prerequisite: Two previous courses in philosophy.

**PHIL 580-589 PHILOSOPHICAL TOPICS (3)** Courses offered under this title will be of variable content. Topics of traditional philosophical interest or of philosophical problems in other areas of knowledge or of con-

temporary interests will be offered. Prerequisite: One lower-division course in philosophy.

## PHYSICAL SCIENCE (PHSC)

**PHSC 501 ADVANCED LABORATORY IN PHYSICAL SCIENCE (2)** Exacting laboratory work of an advanced nature under the guidance of the Department of Physical Science staff. Each student will present and defend his or her work at a seminar. May be repeated for a maximum of 6 credits. Prerequisite: Consent of instructor.

**PHSC 503 EARTH-SPACE SCIENCE (3)** Physical science principles applied in the study of earth and space. Emphasis on experimental and discovery approaches. Prerequisite: PHSC 101.

**PHSC 505 FUNDAMENTAL CONCEPTS IN THE EARTH SCIENCES (3)** Principles of astronomy, geology and related earth sciences. Methods of investigation employed by earth scientists. Observations in the planetarium and field studies in the Baltimore area. Two lecture hours and one two-hour laboratory period. No credit allowed if student has taken ASTR 161 and/or PHSC 121. Prerequisite: GEOL 101 or equivalent.

**PHSC 511 PHYSICAL SCIENCE FOR TEACHERS (3)** An in-service course for teachers in the elementary and/or junior high school designed to develop physical science concepts. Emphasis will be placed on developing these concepts through laboratory work. Prerequisite: Teaching experience.

**ASTR 561 GENERAL ASTRONOMY II (3)** Stars, stellar systems, galaxies and cosmology. Emphasis in determination of the distance scale and modern trends in astronomy. Prerequisite: ASTR 161 General Astronomy I or equivalent.

**PHSC 570-579 SPECIAL TOPICS IN PHYSICAL SCIENCE (1-4)** The study of special topics in the areas of physical science. Special

topics will be determined by their need for study and relevance to existing courses. May be repeated for credit provided a different topic is covered. Prerequisite: Consent of instructor.

**PHSC 594 TRAVEL STUDY (1-3)** A detailed investigation of field problems and phenomena. Locations and topics to be selected by the department and instructors sponsoring program. May be repeated for maximum of 3 credits. Prerequisite: Consent of instructor.

**PHSC 595 COURSE RESEARCH IN 500-LEVEL COURSES (1)**

## PHYSICS (PHYS)

**PHYS 507 INTRODUCTORY MATHEMATICAL PHYSICS (3)** As the mathematical maturity of the students will allow, selected topics will be examined such as the generalized expressions for forces and potentials, vector analysis, applications of Fourier series and complex variables, and solutions of the harmonic oscillator and wave equations. Three lecture hours. Prerequisites: PHYS 212 or PHYS 242; MATH 274.

**PHYS 511 MODERN PHYSICS (4)** Special relativity, the quantum theory, atomic structure and spectra, and nuclear structure and reactions are the main topics covered by the course. Other topics that may be covered involve molecular, solid state, and high energy physics. Four lecture hours. Prerequisites: MATH 274; PHYS 212 or PHYS 242.

**PHYS 533 BASIC ELECTRONICS (4)** Circuit components, characteristics of semiconductors, electrical measurements, method of circuit analysis, electronic devices. Three lecture hours and one three-hour laboratory. Prerequisite: PHYS 212 or PHYS 222 or consent of instructor.

**PHYS 534 DIGITAL ELECTRONICS (4)** Subjects covered will be basic concepts of digital electronics such as: gates, logic mod-



ules, truth tables, digital codes, sequential systems, semiconductor memories, decade counters, etc. The laboratory program is designed to give students firsthand experience on the material covered in lecture using integrated circuits and LED display systems. Two hours lecture and three hours laboratory. Prerequisite: MATH 115 or equivalent.

**PHYS 535 ELECTRONICS (3)** Principles of transistors with emphasis on their design and construction and an introduction to logic circuits. Two lecture hours and one two-hour laboratory. Prerequisite: PHYS 305 and PHYS 335.

**PHYS 537 INTRODUCTION TO MICRO-PROCESSOR-BASED DIGITAL SYSTEMS (3)** Introductory course on basic microcomputer concepts. Topics covered include basic structure and organization of microcomputers, digital logic design, assembly language programming, memory elements and applications. Hardware-oriented experiments will be conducted providing practical experience in interfacing the microcomputer to a variety of instruments and input-output devices. Two hours lecture and two hours laboratory. Prerequisite: PHYS 337.

**PHYS 541-542 INTERMEDIATE PHYSICS LABORATORY, I, II (3, 3)** First semester: the measurement of several fundamental physical constants. Exploration of classical and modern research methods: lasers, holography, optical and nuclear spectroscopy. Second semester: several advanced experiments and a research project. Familiarization with machine shop procedure, vacuum and other experimental techniques. Five laboratory hours. Prerequisite: PHYS 311 or concurrently. (Lab II Prerequisite: PHYS 341.)

**PHYS 545 LASERS AND HOLOGRAPHY (3)** The wavefront-reconstructions, laser theory, the properties and making of holograms, and the applications of lasers and holography will be covered. Special projects will be assigned to students depending upon their individual theoretical and experimental back-

grounds. Prerequisite: PHYS 243 or consent of instructor.

**PHYS 550 MECHANICS (4)** Systems of coordinates, kinematics and transformations; newtonian dynamics of particles; linear systems, oscillations and series techniques; calculus of variations and the Lagrangian and Hamiltonian formulations; application of Lagrangians to gravitation/central force motion. Optional; nonlinear oscillations. Prerequisite: PHYS 242, PHYS 307 or consent of instructor.

**PHYS 551 MECHANICS II (3)** Continuation of PHYS 351. Rotation transformations; perturbation and Green's function techniques in solution of oscillating systems; collisions; rotating frames of reference and dynamics of rigid bodies (including Euler's angles, precession, nutation); theory of coupled small oscillations. Optional; special relativity; continuum mechanics. Prerequisite: PHYS 351.

**PHYS 552 THERMODYNAMICS AND KINETIC THEORY (3)** Principles and laws of classical thermodynamics applied to simple irreversible processes, including chemical, elastic, electric and magnetic phenomena; thermodynamic functions and Maxwell's relations; the conservation equations in elementary kinetic theory; fluctuations and irreversible transfer effects. This course may be taken concurrently with PHYS 243 or by permission. Three lecture hours. Prerequisites: PHYS 212 or PHYS 243, MATH 274.

**PHYS 553 PHYSICAL OPTICS (3)** Electromagnetic theory of light, wave solutions, interference, diffraction, scattering, radiation from coherent and incoherent sources, elementary theory of masers and lasers. Three lecture hours. Prerequisite: PHYS 354 or consent of instructor.

**PHYS 554 ELECTRICITY AND MAGNETISM (4)** Electrostatics, magnetostatics and electromagnetic radiation, including Divergence Theorem and Stoke's Theorem,

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electrostatics in free space and dielectric materials, the Biot-Savart Law, the magnetic vector potential, inductance and electromotance, magnetic materials, Maxwell's equations in free space and in materials, boundary value problems (Snell's and Fresnel's Laws). Prerequisite: PHYS 243, PHYS 307 or consent of instructor.

**PHYS 555 INTRODUCTORY QUANTUM MECHANICS (3)** The Schroedinger equation, states of one particle in one dimension, potential barrier problems in one dimension, the harmonic oscillator, system of particles in one dimension, motion in three dimensions, angular momentum, spin, application to atomic physics. Prerequisite: PHYS 311, PHYS 351 or concurrently.

**PHYS 556 INTRODUCTION TO STATISTICAL MECHANICS (3)** Distribution functions, microcanonical, canonical and grand canonical ensembles, the partition function and thermodynamics relations. Fermi-Dirac and Bose-Einstein statistics, some simple models and applications, the Maxwell-Boltzmann transport equation and the hydrodynamic equation, transport coefficients. Three lecture hours. Prerequisite: PHYS 455.

**PHYS 559 NUCLEAR PHYSICS (3)** A lecture and problem course dealing on an introductory level concerning experimental and theoretical method for the study of nuclear structure. Topics to be covered include: properties of nuclei, electromagnetic transition and beta decay; nuclear models, nuclear reactions and two-body interactions. Prerequisite: PHYS 311, PHYS 307 or consent of instructor; offered in alternate years.

**PHYS 585-586 PHYSICS SEMINAR I, II (1, 1)** Students participate in colloquia on topics of current interest in physics research under guidance instructor. One lecture hour. Prerequisite: Senior standing or consent of instructor.

**PHYS 590 INDEPENDENT STUDY IN PHYSICS (1-4)** Prerequisite: At least junior status and one course in the physics department;

may be repeated for a maximum of 6 credits.

**PHYS 591 DIRECTED READINGS (1-4)** Prerequisite: At least junior status and one course in the physics department; may be repeated for a maximum of 6 credits.

**PHYS 595-596 RESEARCH PROBLEMS IN PHYSICS (1-3)** Individual project in any branch of physics. Students can choose either to work on projects or in areas suggested by physics faculty. At the completion of a project, the student must write a formal research paper on the work done. Students may register for this more than once but at different levels. Prerequisite: Permission of the instructor who will direct the proposed work.

## POLITICAL SCIENCE (POSC)

**POSC 503 THEORY OF INTERNATIONAL POLITICS (3)** The theories of mutual relations of states. Elements of national power; international politics as a struggle for power. Restraints upon the struggle for power. Prerequisite: HIST 242 or POSC 107, or consent of instructor.

**POSC 505 URBAN GOVERNMENT AND POLITICS (3)** The political history of American cities from the 18th century through the recent reform movement. City charters, home rule, types of executives, political machines and the metropolitan area. Prerequisite: POSC 103.

**POSC 506 SIMULATION AND GAMES IN POLITICAL SCIENCE (3)** Analysis of political decisions using the formal methods of rational choice and game theory. Discussion of voting methods, public goods and paradoxes of collective choice. Use of computer simulations and games to model politics. Prerequisite: One upper-division (300 or 400) political science course or permission of the instructor.

**POSC 507 CONTEMPORARY INTERNATIONAL POLITICS (3)** Computer simulation

tion (conducted jointly with colleges and universities throughout the world) used to study formulation and implementation of contemporary international politics. Prerequisite: POSC 107, POSC 303 or consent of instructor.

**POSC 508 COMPARATIVE GOVERNMENT OF FOREIGN POWERS: THE WESTERN WORLD (3)** Examination of the problems of modernization and stable constitutional rule in England, France, Italy and Germany. Prerequisite: POSC 101, POSC 137 or consent of instructor.

**POSC 509 COMPARATIVE POLITICAL SYSTEMS (3)** The course will attempt to bring together the analytical concepts and methodological techniques that may be applied to the study of political systems in a comparative sense. Prerequisite: POSC 103, POSC 137 or consent of instructor.

**POSC 511 AFRICAN GOVERNMENT AND POLITICS (3)** Examination of the rise of African nationalism and the emergence of new states in Africa. Attention is directed to the influence of colonial rule and traditional political institutions on the development of party politics, patterns of government and pan-African ideas. A trend toward military rule, political problems of the independent Africa, and the efforts of each country to build a strong and viable political system are emphasized. Prerequisite: Any political science course or consent of instructor.

**POSC 512 THE LATIN AMERICAN POLICY OF THE UNITED STATES (3)** Analysis of the Latin American policy of the United States from the Monroe Doctrine to the present. Emphasis will be on historical, political, economic and security factors in the ebb and flow of inter-American relations. Prerequisite: POSC 101, POSC 137 or consent of instructor.

**POSC 513 POLITICAL BEHAVIOR (3)** The purpose of this course is to introduce the student to the substantive theory and methodology of behavioral analysis. Topics include

voting behavior, elite behavior and an analysis of types of political conflict. Prerequisite: POSC 101 or consent of instructor.

**POSC 514 PUBLIC ADMINISTRATION (3)** Administration as a central element of contemporary society, with special reference to the problems of government organization, control, personnel, finance and public relations. Prerequisite: POSC 103.

**POSC 515 THE PRESIDENCY (3)** A discussion of the origin of the office, the selection of the president and policy making in the executive branch. Prerequisite: POSC 103.

**POSC 516 CONGRESS (3)** An investigation of the relations of Congress with the other branches of government and with political parties and interest groups. The course also examines the relationships between a member of Congress and his constituency as well as the internal dynamics of Congress. Prerequisite: POSC 103.

**POSC 517 AMERICAN POLITICAL PARTIES (3)** Origin and development of the American two-party system. The activities of pressure groups and organizations and their effects upon the party system. Prerequisite: POSC 103 or consent of instructor.

**POSC 518 CONSTITUTIONAL LAW I (3)** The first half of a two-part sequence on the origins of the Constitution, federalism and the separation of power. Prerequisite: POSC 101 or POSC 103.

**POSC 519 CONSTITUTIONAL LAW II (3)** The second half of two-part sequence covering the major issues of Constitutional law, focusing primarily on the activities of the Supreme Court in civil rights and civil liberties. Prerequisite: POSC 101 or POSC 103.

**POSC 521 POLITICS AND ENVIRONMENTAL POLICY (3)** Analysis and investigation of U.S. environmental problems from a political perspective. Prerequisite: POSC 103 or consent of instructor.

**POSC 527 POLITICAL THEORY I (3)** Political thought in the West from the Greeks to the end of the 16th century. Prerequisite: POSC 101 or consent of instructor.

**POSC 528 POLITICAL THEORY II (3)** Political philosophers and their writings since the 16th century. Attention given to the conflict of ideologies in the 20th century. Prerequisite: POSC 101 or consent of instructor.

**POSC 530 POLITICAL IDEAS OF SOCIALISM AND COMMUNISM (3)** This course deals with selected topics in the political theory of socialism and communism, including socialism and the ancient regimes, socialism and political organization, Russian, Leninist and Stalinist theory and socialist ideas in the post-Cold-War period. Prerequisite: POSC 528.

**POSC 531 POLITICS AND RELIGION IN GLOBAL PERSPECTIVE (3)** Church-state conflicts in a global context emphasizing Poland, Nicaragua, Nigeria, Iran, Israel and the United States. Prerequisite: POSC 101, POSC 107, or any course of history of the Soviet Union or Eastern Europe or consent of instructor.

**POSC 532 UNITED STATES-RUSSIAN RELATIONS (3)** Relations between the United States and Russia. Emphasis on Soviet and post-Soviet periods, nationalities, democratization and creation of market economics. Prerequisite: Any 100-level political science course or consent of instructor.

**POSC 533 DOMESTIC POLITICS OF THE SOVIET UNION AND EASTERN EUROPE (3)** Analysis of selected policies of the Soviet Union and socialist Eastern Europe emphasizing health, education and welfare. Prerequisite: POSC 101, 107, 137, or consent of instructor.

**POSC 535 AFRICA IN WORLD POLITICS (3)** The role of African nations in the nuclear age, and their efforts to achieve unity. Prerequisite: POSC 511 or consent of instructor.

**POSC 536 COMPARATIVE GOVERNMENTS OF THE SOVIET UNION AND EASTERN EUROPE (3)** This course introduces students to the political systems of the Soviet Union and Eastern Europe. Particular attention is given to the study of structure and function of government and its constitutional, legal and political aspects. Prerequisite: POSC 101 or POSC 137, or consent of instructor.

**POSC 537 CASTRO AND THE CUBAN REVOLUTION (3)** A discussion of the factors that led up to the Castro Revolution in 1959 and the subsequent impact of the creation of the first socialist state in the Western Hemisphere. Prerequisite: POSC 512, POSC 551 or consent of instructor.

**POSC 538 COMPARATIVE GOVERNMENT OF FOREIGN POWERS: RUSSIA AND THE EAST (3)** Constitutional and legal processes of Russia, Japan, China and other Eastern powers. Prerequisite: POSC 101, POSC 137 or consent of instructor.

**POSC 539 UNITED STATES FOREIGN POLICY IN SOUTHEAST ASIA (3)** American foreign policy in Southeast Asia in the post-World War II period. Prerequisite: POSC 107, POSC 303 or consent of instructor.

**POSC 541 CONTEMPORARY UNITED STATES-WESTERN EUROPEAN RELATIONS (3)** Emphasis will be on NATO, the European Economic Community and the Anglo-American efforts to create an Atlantic partnership between Europe and the United States. Prerequisite: POSC 103, POSC 137 or consent of instructor.

**POSC 550 GROUP POLITICS AND PUBLIC OPINION (3)** The role of pressure groups and public opinion in the American political system. Prerequisite: Junior standing and 9 credits of political science, or consent of instructor.



**POSC 551 THE GOVERNMENT AND POLITICS OF LATIN AMERICA (3)** An examination of the informal and formal rules of the political "game" in Latin America with an emphasis on four types of political systems found in contemporary Latin America: democratic reformist, revolutionary, populist and military authoritarian. Prerequisite: POSC 101, POSC 137 or consent of instructor.

**POSC 552 POLITICS AND RELIGION IN THE U.S.A. (3)** Constitutional separation of politics and religion in contrast to the "religionization" of politics through the efforts of religious groups. Prerequisite: POSC 101, or any course in U.S. history, religion or consent of instructor.

**POSC 555-556 INTERNATIONAL LAW AND ORGANIZATION I, II (3, 3)** An examination of the theories and the development of international law up to the present. The character of the modern state system, the role of international organizations and international law, and the resort to force. Prerequisite: 15 credits in political science including POSC 303, or consent of instructor.

**POSC 557 SEMINAR: USE OF FORCE IN INTERNATIONAL LAW (3)** Use of force as an instrument of foreign policy, legal restraints on its use. Prerequisite: 15 credits in POSC including POSC 303 or consent of instructor.

**POSC 559 POLITICAL AND SOCIAL ASPECTS OF REVOLUTION (3)** Nature and function of violence and revolution in modern social systems. Prerequisite: POSC 101, POSC 137 or consent of instructor.

**POSC 561 RESEARCH METHODS IN POLITICAL BEHAVIOR (3)** The major emphasis in this course will be on the use of quantitative techniques in political research. Topics include survey research, the use of computers and statistical analysis. Prerequisite: Any course at 100 level.

**POSC 563 SCOPE AND METHODS OF POLITICAL SCIENCE (3)** The nature of political inquiry, approaches to the study of politics and government, and empirical methods of research will be the core areas of this course. Prerequisite: A minimum of 9 credits in political science including at least one upper-division course.

**POSC 564 JUDICIAL SYSTEM (3)** Roles, functions, and operations of American judicial system. Examining ideology of law and justice, politics of criminal processing and consequences of legal decisions. Prerequisite: POSC 103 or consent of instructor.

**POSC 567 POLITICS AND THE BUDGETARY PROCESS (3)** Analysis of the budgetary process. Prerequisite: POSC 375 or consent of instructor (not open to students who have successfully completed the course as a special topic POSC 470-479).

**POSC 570-579 SPECIAL TOPICS IN POLITICAL SCIENCE (3)** Examination of current topics in political science. The content of the course will depend upon mutual faculty and student interest. Prerequisite: Any 100-level POSC course or consent of instructor.

**POSC 581 SEMINAR: PUBLIC POLICY ANALYSIS (3)** Theoretical and practical approaches in the analysis of policy formulation, implementation and evaluation. Prerequisite: 15 credits in POSC including one upper-division course or consent of instructor.

**POSC 582 SEMINAR IN POLITICAL SCIENCE (3)** Analysis of major issues in political science. Prerequisite: 15 credits in POSC including one upper-division course or consent of instructor.

**POSC 583 SEMINAR: POLITICS AND THE NEWS MEDIA (3)** Relationship between government and news media. Prerequisite: 15 credits in POSC including one

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upper-division course or consent of instructor.

**POSC 585 DEMOCRATIC THEORY SEMINAR (3)** 16th-century origins and analysis of variants. Prerequisite: 15 credits in POSC including POSC 428 or consent of instructor.

**POSC 586 SEMINAR: JUSTICE AND THE LAW (3)** Central legal, political and moral questions concerning justice and the law. Prerequisites: POSC 101, POSC 209 and POSC 401.

**POSC 588 SEMINAR: TOPICS IN PUBLIC POLICY (3)** Focus on policy areas of contemporary interest and significance. Prerequisite: 15 credits in POSC including one upper-division course or consent of instructor.

**POSC 590 INDEPENDENT STUDY (1-3)** Individual and supervised study in selected areas of political science. Admission by consent of instructor.

**POSC 591 SEMINAR IN CONTEMPORARY UNITED STATES FOREIGN POLICY (3)** Contemporary nature, basis and instruments of American foreign policy. Prerequisite: 15 credits of POSC including POSC 107 or 303 or consent of instructor.

**POSC 593 INTERNSHIP (3)** Familiarizes students with the practical working of government institutions in which students combine theory and practice. No more than 3 credits may be earned in any one semester. Prerequisite: Junior/senior standing and consent of instructor.

## PSYCHOLOGY (PSYC)

**PSYC 503 PSYCHOLOGY OF INFANCY AND CHILDHOOD (3)** Advanced course reviewing historical and current changes in the areas of infancy and childhood. Emotional, cognitive and individual development will be covered in-depth. Emphasis is placed

on critical analysis of research theory construction and methods. Prerequisite: PSYC 203; spring semester.

**PSYC 504 ADOLESCENT PSYCHOLOGY (3)** Physical, emotional and intellectual development during adolescence; social development and heterosexuality; adolescent personality; problems of adjustment; juvenile delinquency. Prerequisite: PSYC 203; fall and spring semester.

**PSYC 509 ORGANIZATIONAL PSYCHOLOGY (3)** Human relations in the work setting. Topics include theory and research concerning leadership, job satisfaction and motivation, organizational communication, group dynamics and organizational change. Prerequisite: 6 credits of psychology; fall semester.

**PSYC 510 PSYCHOLOGY OF LEARNING (3)** Analysis of selected problems in both human and animal learning including reinforcement, punishment, verbal learning and verbal behavior. Prerequisite: 9 credits of psychology or consent of instructor.

**PSYC 511 TESTS AND MEASUREMENTS (3)** Psychological and educational testing and evaluation. The construction, administration, interpretation and use of the various evaluative devices of aptitude and achievement. Prerequisites: PSYC 101 and PSYC 212; fall, spring and summer semester.

**PSYC 512 PSYCHOPHARMACOLOGY (3)** Mechanisms of drugs, their effects on behavior, and related topics. Prerequisite: 9 hours of PSYC or consent of instructor.

**PSYC 513 BEHAVIOR MODIFICATION I (3)** Examination and application of the basic principles of the experimental analysis of behavior, with an emphasis on the applied aspects of this modern discipline to schools, jobs, interpersonal relations and self-control. Prerequisite: 9 credits of psychology or consent of instructor.

**PSYC 515 MOTIVATION (3)** Interaction between physiological, neurological and pharmacological aspects of motivation with environmental influences such as culture, learning and social dynamics. Issues in human motivation and emotion that will be emphasized are aggression, sex, achievement (competence) and cognitive-social influences. Prerequisite: 6 credits of psychology; PSYC 203 and junior standing recommended.

**PSYC 517 SENSATION AND PERCEPTION (3)** A systematic investigation of the basic senses such as vision, audition, taste, smell and touch will be undertaken. The organization of sensory input will also be emphasized. Both human and nonhuman data will be presented. Prerequisite: 9 credits of psychology or consent of instructor.

**PSYC 518 COMPUTER IMPACT ON PSYCHOLOGY AND HUMAN BEHAVIOR (3)** Effect of computers on psychological training, research methods, clinical and counseling practices, theory development, psychological content and human behavior. Examination of psychologically oriented computer program (e.g., clinical interviewing). Computer experience not necessary. Prerequisite: 6 credits of psychology.

**PSYC 519 HUMANISTIC PSYCHOLOGY (3)** Explores the "third force" in modern psychology, considering the "whole" person-in-society, focusing on existential, transpersonal and mind-body psychology. Prerequisite: PSYC 101, PSYC 203.

**PSYC 521 APPLICATIONS OF BEHAVIORAL PRINCIPLES TO FAMILY AND CLASSROOM ENVIRONMENTS (3)** Practical application of operant techniques to child management and family functioning. Course will deal with behavioral analysis, behavior modification programs and family contracting both at school and at home, with emphasis on learning basic technical skills. Prerequisite: PSYC 211; fall and spring semester.

**PSYC 524 SOCIAL PSYCHOLOGY (3)** The structure and function of groups. Recent advances in sociology, anthropology and psychiatry as related to psychology. Prerequisite: 6 credits of psychology; fall and spring semester.

**PSYC 530 PSYCHOLOGY OF INDIVIDUAL DIFFERENCES (3)** Individual differences in human traits and characteristics: methodology, basic principles, and major findings in research. Prerequisite: PSYC 101 and PSYC 111; alternate spring semesters.

**PSYC 531 GROUP DYNAMICS (3)** Intensive study of group interactions with emphasis upon reciprocal group influence of behavior. Prerequisite: PSYC 325 or consent of instructor; fall semester.

**PSYC 532 CROSS-CULTURAL PSYCHOLOGY (3)** Comparison of psychological behavior and theory in Western and non-Western cultures. Prerequisite: PSYC 101.

**PSYC 535 INTERNSHIP IN PSYCHOLOGY (3-6)** Placement in a community service agency to familiarize the student with its current practices. Supervised client contract will be provided. May be repeated for a maximum of 12 credits but only 6 can apply to the major, the other 6 credits will be used as general electives. Prerequisite: Consent of instructor and 233 credits of psychology.

**PSYC 539 THE INITIAL INTERVIEW (3)** Clinical observation and practicum experience. Focus on interviewer and interviewee dimensions and relationship with patients. Use of tapes, seminars and individual supervision. Prerequisite: PSYC 205, and admission to Clinical Concentration Program; fall semester.

**PSYC 540 ENVIRONMENTAL PSYCHOLOGY (3)** The relationship between the physical and social environment and behavior, i.e., places, spaces and people. How man/woman construes, interprets, comprehends and feels about the environment and



how the environment functions as a reflection of human needs and values. Topics include environmental design, crowding, privacy, human territoriality, personal space. Prerequisite: PSYC 101; fall and spring.

**PSYC 542 ABNORMAL PSYCHOLOGY (3)** Disordered personal reactions to life. Organic and functional phenomena plus therapeutic techniques. Prerequisite: 9 credits psychology including PSYC 203 or consent of instructor; fall and spring.

**PSYC 547 SEX DIFFERENCES: PSYCHOLOGICAL PERSPECTIVES (3)** Sex role/personality development is examined from various perspectives: social, cultural, evolutionary and biological. Changing conceptions with regard to women, their roles and self-concepts, are emphasized within the overall context of sex difference and similarities in behavior. Prerequisite: PSYC 203 or permission of instructor.

**PSYC 549 THE PSYCHOLOGY OF LESBIAN CULTURE (3)** This course develops an understanding of the impact of culture on the development of a lesbian identity and on social/emotional aspects of a lesbian identity within a psychological framework. Prerequisites: Two courses in psychology or women's studies, or consent of instructor.

**PSYC 550 PERSONALITY (3)** Theoretical and practical approaches to the study of personality. Introduction to psychodynamics and to methods and materials of assessment. Prerequisite: 6 credits of psychology; fall and spring semester.

**PSYC 551 INTRODUCTION TO THE EXCEPTIONAL CHILD (3)** Children with atypical physical, mental, social and emotional development, including the physically handicapped, the mentally retarded, the gifted, and emotionally disturbed children. Prerequisite: PSYC 201, PSYC 203 or PSYC 211.

**PSYC 553 ISSUES IN MENTAL HEALTH INTERVENTION (2)** Readings, lectures and seminars relating to psychological emergen-

cies and the modes of intervention during psychological crises. Prerequisites: PSYC 425 and PSYC 454 (can be taken concurrently); admission to Clinical Concentration Program.

**PSYC 557 GENDER IDENTITY IN TRANSITION (3)** Psychological consequences of changing definitions of femininity, masculinity and personhood will be examined by using recent theories of gender identity formation. Concepts such as androgyny, sex-role transcendence and future shock will be related to psychological adaptation to change. Prerequisite: PSYC 315 or PSYC 447, or consent of instructor.

**PSYC 560 ETHOLOGY AND COMPARATIVE PSYCHOLOGY (3)** A survey of the major behavioral adaptations in nonhuman and human species, within the framework of evolutionary theory, ethology and experimental psychology. Three lecture hours weekly. Prerequisite: 9 credits of psychology or consent of instructor.

**PSYC 561 COGNITIVE PSYCHOLOGY (3)** Examination of human cognitive processes and theories of cognition from the perspectives of information processing theory, neuroscience and connectionism. Topics include pattern perception, attention, memory, concepts, decision making, problem solving and language. Prerequisite: PSYC 314 or consent of instructor.

**PSYC 565 PHYSIOLOGICAL PSYCHOLOGY (3)** Course is concerned with an introduction to the physiological bases of behavior. The topics to be considered are basic neuroanatomy and neurophysiology, sensory and motor systems, motivational systems, and "higher order" behavioral systems. Three lecture hours weekly. Prerequisite: 9 credits of psychology or consent of instructor.

**PSYC 567 MIDLIFE DEVELOPMENT (3)** A study of adult behavior between the ages of 18 and 60. The developmental stages of young adulthood, adulthood and middle age will be discussed along with topics pertinent



to each of the levels such as leaving and becoming emancipated from the family; the transition and adjustment to marriage and work; and bridging the gap between ideals and actual fulfillment. Prerequisite: PSYC 203.

**PSYC 570-579 SPECIAL TOPICS (1-3)** Survey and critical evaluation of modern literature pertaining to selected problems in psychology. May be repeated in a different topic for a maximum of 12 credits.

**PSYC 580 SYSTEMS OF PSYCHOLOGY (3)** Schools of psychology and their theoretical and methodological approaches. Prerequisite: Junior psychology major and consent of instructor; alternate springs.

**PSYC 581 READING IN PSYCHOLOGY (1-2)** A survey of relevant research literature under the guidance of a staff member who will direct the student's research. This course may be taken a maximum of two times for major credit purposes. Prerequisite: 9 credits of psychology and consent of instructor.

**PSYC 587 ADVANCED EXPERIMENTAL DESIGN (3)** Analysis of variance, multiple comparisons, nonparametrics, general problems related to sampling, experimenter effects. SPSS analysis, reading of the experimental literature. Prerequisite: PSYC 314, Honors approval or consent of instructor.

**PSYC 591 INDEPENDENT INVESTIGATION IN PSYCHOLOGY (3)** Opportunity for specially qualified students to undertake research problems according to their interest and training under the direction of a staff member. May be repeated for a maximum of 12 credits but only 6 credits can apply to the major; the other 6 credits will be used as general electives. Prerequisite: PSYC 261 and consent of instructor; fall, spring.

**PSYC 594 TRAVEL AND STUDY ABROAD IN PSYCHOLOGY (1-3)** Study of selected topics, issues, programs, projects and/or facilities related to the field of psy-

chology. Locations and topics to be selected by department and instructor sponsoring the program. Prerequisite: Consent of instructor.

**PSYC 601 SEXUAL COUNSELING (3)** Human sexual relationships, with emphasis on social and sexual problems and new treatment techniques for sexual dysfunction. Prerequisite: Psychology, health science, or nursing major or consent of the department.

**PSYC 603 HUMAN LEARNING (3)** Aspects of learning applicable specifically to human behavior including topics such as acquisition, memory, problem solving, creativity and language. Topics discussed within a framework of historic and current theoretical research perspectives. Prerequisite: 21 credits in psychology.

**PSYC 605 COUNSELING TECHNIQUES (3)** Training the student in practical counseling skills through demonstration and role playing with feedback in behavioral performance.

**PSYC 606 CAREER DEVELOPMENT (3)** Designed to familiarize students with aspects of career development, to introduce them to a variety of relevant resources and media, and to assist them in integrating this knowledge by planning a program of career development for a specific group.

**PSYC 607 APPLIED THEORIES OF COUNSELING (3)** Counseling theorists whose applied methodology has been successful in the treatment of various client populations. Techniques and application of methodologies in field settings.

**PSYC 609 ADVANCED COUNSELING TECHNIQUES (3)** Advanced therapeutic interventions with various client populations. Prerequisite: PSYC 605.

**PSYC 610 ADVANCED PSYCHOLOGY OF AGING (3)** Advanced study of the changes in learning, emotions, personality and social behavior and the impact of culture

and attitudes on aging. Prerequisite: 6 credits of psychology including PSYC 203. Students should be aware of how to read and understand psychology journals and how psychological research is conducted. Fall semester, evening in alternate years.

**PSYC 611 DEVELOPMENTAL PSYCHOLOGY (3)** Psychological structures and functions in human development across the life span. Both theoretical and research approaches are presented.

**PSYC 613 COMMUNITY MENTAL HEALTH COUNSELING (3)** Types of community health services and the relationships between those services; the responsibility of counseling in a mental health center; and the area of mental health consultant. Emphasis will be given to the application of counseling skills in a mental health setting.

**PSYC 615 INTRODUCTION TO RESEARCH METHODS IN COUNSELING (3)** Principal methods of behavioral research emphasizing concepts rather than statistical procedures. Preparation of counselors to evaluate methods, designs, and results of counseling research.

**PSYC 620 ASSESSMENT OF INTELLIGENCE (3)** Construction, standardization, administration, scoring and interpretation of tests. Prerequisite: Matriculation in clinical or school psychology and consent of program director.

**PSYC 622 ADVANCED CROSS-CULTURAL PSYCHOLOGY (3)** Impact of social and cultural norms on the development of human psychological behavior including: aging, ethnicity, gender, and psychosocial orientation, and their implications for counseling. Prerequisite: Graduate standing in psychology.

**PSYC 625 BEHAVIORAL TECHNIQUES (3)** Application of behavioral strategies to children in home and school settings. Consultation stressed. Prerequisite: 21 credits in psychology, matriculation in graduate program in psychology, consent of program director.

**PSYC 631 ADVANCED ABNORMAL PSYCHOLOGY (3)** Current and historical perspectives of psychopathology. Emphasis on various diagnostic approaches. Prerequisite: PSYC 361.

**PSYC 635 INTRODUCTION TO CLINICAL HYPNOSIS (3)** Ethics, issues, history and uses of clinical hypnosis. Relaxation and guided imagery techniques, demonstrations of hypnotic inductions, self-hypnotism and personal projects, therapeutic applications for children, adolescents and adults.

**PSYC 637 COUNSELING STRATEGIES FOR DRUG AND ALCOHOL ABUSE (3)** Understanding the basic issues of substance abuse, referrals, clinical assessments and developing counseling strategies for successful intervention.

**PSYC 647 USE OF TESTS IN COUNSELING (3)** Practice in the use and analysis of techniques for understanding the individual with emphasis upon standardized procedures.

**PSYC 651 TECHNIQUES OF INTERVENTION (3)** Group and individual intervention strategies. Prerequisite: Matriculation in school, clinical or counseling psychology and consent of program director.

**PSYC 653 RESEARCH ISSUES IN SCHOOL/CLINICAL PSYCHOLOGY (3)** Analysis of major issues in school and/or clinical psychology. Prerequisite: PSYC 212, graduate standing in school or clinical psychology, and consent of program director.

**PSYC 661 FOUNDATIONS OF REHABILITATION COUNSELING (3)** Development of rehabilitation programs; their legal basis and historical background. Roles of medical, psychological, educational and community resources in the rehabilitation program included. Client eligibility, determination, counselor responsibilities will be reviewed.

**PSYC 663 SYSTEMS OF PSYCHOTHERAPY (3)** Prominent schools of psychotherapy, emphasis on the psychotherapeutic aspect

of education and clinical settings. Prerequisites: PSYC 350, PSYC 361, PSYC 230 and PSYC 631.

**PSYC 665 PSYCHOTHERAPY AND BEHAVIOR CHANGE I (3)** First of two-semester sequence. Readings, lectures and actual experience related to theories and techniques currently used for behavior change. Individual psychotherapy, family therapy, transactional analysis, rational-emotive therapy and behavior modification reviewed. May be taken without Psychotherapy and Behavior Change II. Prerequisite: Graduate standing in school or clinical psychology tracks and consent of program director.

**PSYC 666 PSYCHOTHERAPY AND BEHAVIOR CHANGE II (3)** Second of two-semester sequence. Continued analysis of psychotherapy approaches through readings, lectures and experience. Prerequisite: PSYC 665 and consent of program director.

**PSYC 667 PSYCHOSOCIAL ASPECTS OF DISABILITY (3)** Psychosocial challenges facing the disabled person's self-concept. Approaches to facilitating independence and self-actualization.

**PSYC 668 MEDICAL ASPECTS OF DISABILITY (3)** Structure and function of bodily systems and implications of physical disabilities in coping with the problems of daily living.

**PSYC 673 ADVANCED EXPERIMENTAL PSYCHOLOGY I (4)** Experimentation in the field of human behavior. Prerequisite: PSYC 212, PSYC 314 or equivalent; consent of department.

**PSYC 674 ADVANCED EXPERIMENTAL PSYCHOLOGY II (4)** Major concepts, processes and methods in the field of animal behavior, with primary emphasis on ethology and comparative psychology. Prerequisite: PSYC 212, PSYC 314 or equivalent; consent of department.

**PSYC 675 PROSEMINAR I (3)** Selected issues in areas such as learning, motivation, physiological psychology and ethology-comparative psychology within the context of research and scientific writing. Prerequisite: PSYC 314 or equivalent.

**PSYC 676 PROSEMINAR II (3)** Selected issues in areas such as social, developmental, industrial, personality, ethology/comparative, and physiological psychology. Prerequisite: PSYC 314 or equivalent.

**PSYC 677 LEARNING (3)** Overview of current issues in learning. Emphasis on the critical analysis and reporting of primary literature. Prerequisite: PSYC 305 or consent of instructor.

**PSYC 679 SPECIAL TOPICS SEMINAR (1-3)** Topics vary, according to the instructor.

**PSYC 681 ADVANCED HISTORY AND SYSTEMS OF PSYCHOLOGY (3)** Ancient and modern psychological history, drawing heavily from philosophy, physiology and psychology in various countries. Analysis of systems includes a study of functionalism, structuralism, behaviorism, Gestalt and psychoanalysis.

**PSYC 685 COLLEGE TEACHING PRACTICUM (3)** Supervised teaching of introductory psychology. Prerequisite: PSYC 684.

**PSYC 687 ADVANCED EXPERIMENTAL DESIGN I (3)** Treatment of descriptive and inferential statistical methods and design considerations. Prerequisite: PSYC 212 or equivalent.

**PSYC 688 ADVANCED EXPERIMENTAL DESIGN II (3)** Treatment of advanced analysis of variance designs and related techniques. Prerequisite: PSYC 687 or equivalent.

**PSYC 689 MULTIVARIATE METHODS (3)** Multivariate statistical methods useful in behavioral scientific research. Topics: correla-

tion, regression, factor analysis, discriminate analysis. Prerequisites: PSYC 687 and HRD 695.

**PSYC 695 INDEPENDENT STUDY (3)** Individual and supervised study in selected areas of psychology. Prerequisite: Consent of instructor.

**PSYC 697 PRACTICUM IN CLINICAL PSYCHOLOGY (3)** Supervised experience in psychological interviewing, assessment and psychotherapy. Practicum in which students will meet for individualized supervision with the practicum instructor. Prerequisites: PSYC 620, M.A. candidacy in clinical psychology and consent of program director.

**PSYC 703 PRESCHOOL ASSESSMENT (3)** Formal and informal assessment techniques including behavioral assessments and adaptive behavior scales. Prerequisites: PSYC 620, matriculation in School Psychology Track and consent of program director.

**PSYC 713 ROLE OF THE SCHOOL PSYCHOLOGIST (3)** History and foundations of school psychology, ethics and standards of practice, professional trends, organization and operation of schools. Prerequisite: Matriculation in School Psychology Track and consent of program director.

**PSYC 715 ADVANCED SEMINAR IN PSYCHOTHERAPY (3)** Counseling and therapy techniques used by counselors and other professional personnel working with children and adults. Prerequisite: PSYC 609.

**PSYC 717 THEORIES OF FAMILY COUNSELING (3)** Theoretical approaches and strategic methods of evaluating and counseling disturbed families.

**PSYC 718 TECHNIQUES OF FAMILY COUNSELING (3)** Identification of problems that cause families to deteriorate, diagnosis of those problems, and techniques that will help families work through their difficulties. Emphasis on development of skills essential to effective family counseling practice.

**PSYC 721 GROUP COUNSELING (3)** Theories, principles and techniques of group counseling. Prerequisite: Must have passed the departmental advancement to candidacy examination and have consent of instructor.

**PSYC 723 GROUP COUNSELING PRACTICUM (3)** Supervised practical experience in leading a counseling group. Prerequisite: PSYC 721, consent of course instructor and student must have successfully passed the advancement to candidacy exam.

**PSYC 731 SCHOOL-BASED CONSULTATION (3)** Theoretical and applied aspects of school consultation within framework of curricular, administrative and overall school environment. Prerequisite: Matriculation in School Psychology Track or consent of instructor.

**PSYC 733 EXCEPTIONAL CHILD: ADVANCED ISSUES (3)** Identification of and planning for the major exceptionalities in the schools. Stress on major diagnostic categories and relevant new techniques. Prerequisite: Matriculation in School Psychology Track, consent of program director.

**PSYC 745 PRACTICUM IN COUNSELING PSYCHOLOGY (6)** Supervised experience in educational, vocational and personal counseling. Must be taken in two separate semesters (3 credits per semester). Prerequisites: Must have passed the departmental advancement to candidacy examination and have consent of counseling program director.

**PSYC 755 COGNITIVE THERAPY I (3)** Theory and techniques of cognitive and rational-emotive therapy, including assessment strategies and basic applications. Prerequisites: PSYC 631, PSYC 655, PSYC 665, matriculation in Clinical Psychology Program and consent of program director.

**PSYC 756 COGNITIVE THERAPY II (3)** Advanced applications of cognitive and rational-emotive therapy to specific clinical problems and differing client populations, ranging from children to adults. Prerequisite:



sites: PSYC 631, PSYC 655, PSYC 665, matriculation in Clinical Psychology Program and consent of program director.

**PSYC 761 SOCIAL-EMOTIONAL ASSESSMENT OF CHILDREN AND ADOLESCENTS (3)** Administration, scoring and interpretation of currently used assessment techniques. Prerequisite: Matriculation in School Psychology Track or Clinical Psychology Program and consent of program director.

**PSYC 765 PERSONALITY ASSESSMENT IN CLINICAL PSYCHOLOGY (3)** Theoretical and empirical bases underlying personality assessment. Introduction to methods and instruments used in clinical evaluation. Prerequisite: Matriculation in Clinical Psychology Program and consent of program director.

**PSYC 766 ADVANCED PERSONALITY ASSESSMENT IN CLINICAL PSYCHOLOGY (3)** Expand skill-building process in administration, analysis and report of personality assessment data with clinical populations. Prerequisite: PSYC 765 and consent of program director.

**PSYC 771 SCHOOL PSYCHOLOGY PRACTICUM I (3)** Fieldwork under the supervision of a certified or licensed psychologist. Prerequisites: PSYC 620 and PSYC 761; matriculation in School Psychology Program and consent of program director.

**PSYC 773 SCHOOL PSYCHOLOGY PRACTICUM II (3)** Fieldwork under the supervision of a certified or licensed psychologist. Students must be available for clinic or school placement. Stress on techniques appropriate for the schools. Prerequisites: PSYC 651, PSYC 731 and PSYC 771; matriculation in School Psychology Program and consent of program director.

**PSYC 790 ETHICAL, LEGAL AND PROFESSIONAL ISSUES IN PSYCHOLOGY (3)** Treatment of ethical, legal and professional issues related to the practice of school, clinical

and counseling psychology. Prerequisite: Consent of instructor.

**PSYC 793 INTERNSHIP IN COUNSELING (3-9)** Intensive experience within a counseling facility involving exposure to the many facets of a mental health professional, including administrative and record-keeping duties; individual and group counseling observations and experiences; referral resources, etc. This course may be repeated up to a total of three times to meet the 1,000-hour counselor licensure requirements. Prerequisite: Consent of instructor.

**PSYC 794 INTERNSHIP IN SCHOOL PSYCHOLOGY (1-3)** Students must be enrolled in the School Psychology Program to enroll in this course. Student applies for placement in an internship in a school or clinic. This course may be repeated up to a total of four times. Prerequisite: CAS candidate in School Psychology Concentration and consent of program director.

**PSYC 797 INTERNSHIP IN CLINICAL PSYCHOLOGY (3)** Supervised field experience in a community mental health center, state psychiatric hospital, or other public mental health facility with exposure to the duties of a master's level clinical psychologist including psychological assessment, psychotherapy and report writing. Prerequisite: PSYC 697 and consent of Clinical Psychology Program director.

**PSYC 898 THESIS (6)**

**PSYC 899 THESIS CONTINUUM (1)**

## READING EDUCATION (REED)

**REED 601 READING THEORY AND PRACTICE (3)** Theoretical foundations of reading instruction; methods and materials used in integrated literacy learning. Prerequisite: One undergraduate course in teaching of reading.

**REED 605 MARYLAND SCHOOL PERFORMANCE PROGRAM: READING AND WRITING ASSESSMENT AND INSTRUCTION (3)** MSPP reading and writing outcomes, assessment, and instruction including application of instructional stances and scoring rubrics. Prerequisite: One undergraduate course in reading.

**REED 609 READING ASSESSMENT (3)** Reading assessment using both standardized tests and informal procedures; interpretation of assessment data. Prerequisite: REED 601.

**REED 621 READING DISABILITIES (3)** Etiology of reading disabilities, observation and interview procedures, standard and informal tests, report writing and instructional intervention. Prerequisites: REED 601 and REED 609.

**REED 622 CORRECTIVE READING/EARLY INTERVENTION (3)** Modification of classroom instruction to meet the needs of atypical learners. Examination of early intervention programs to prevent reading difficulties. Prerequisite: REED 601 and REED 609.

**REED 623 EVALUATION OF READING RESEARCH (3)** Research and experimentation methodology. Prerequisite: A course in test and measurements of statistics and consent of instructor.

**REED 624 METHODS AND MATERIALS FOR TEACHING READING IN HIGHER EDUCATION (3)** Current methods and materials used in the teaching of reading and study skills in post-secondary settings. Prerequisite: 6 credits in reading education or consent of instructor.

**REED 625 ORGANIZATION AND ADMINISTRATION OF READING AND STUDY SKILLS PROGRAMS IN HIGHER EDUCATION (3)** Principles, practices and problems establishing reading/study skills programs in post-secondary settings. Prerequisite: 6 credits in reading education or consent of instructor.

**REED 626 CLINIC INTERNSHIP IN READING (3)** Supervised clinical experience with clients with reading difficulties. Prerequisites: REED 601, REED 609 and REED 621.

**REED 660 INTEGRATING TECHNOLOGY IN LITERACY INSTRUCTION (3)** A course designed to help teachers develop technology-based reading instruction. Emphasis on designing reading segments on phonemic awareness, vocabulary development, comprehension and writing, using presentation, graphics, and multimedia authoring software. Prerequisites: ISTC 301/501 and REED 601 or equivalent.

**REED 663 LITERATURE-BASED INSTRUCTION IN THE LANGUAGE ARTS (3)** Theories underlying literature-based instruction examined; recent research evaluated, instructional techniques introduced, modeled, and applied; materials for instruction cooperatively developed; and criteria for literature selection established. Prerequisite: REED 601.

**REED 665 TEACHING READING AND WRITING IN THE CONTENT AREAS K-12 (3)** Examination of interrelationship of reading and writing, and their roles in instruction of content areas, K-12. Prerequisite: REED 601.

**REED 670 SPECIAL TOPICS IN READING EDUCATION (3-6)** In-depth study of a selected topic in reading education. Specific requirements and prerequisites will vary and will be designated by the department each time a topic is scheduled. Approval by the reading program director is required. Prerequisite: Varies according to topic.

**REED 695 INDIVIDUALIZED STUDY IN READING EDUCATION (3-6)** Individually planned program of study, which will permit the student to engage in research and/or field studies in reading education. Approval by the reading program director is required. Prerequisite: Varies according to areas of study.

**REED 726 ADVANCED CLINIC INTERNSHIP IN READING (3)** Advanced clinical experience with clients, families and para-professionals. Prerequisite: REED 626.

**REED 729 SEMINAR IN READING (3)** Review of theories and research in the field of reading. Prerequisite: 15 credits in reading education or consent of instructor.

## SCIENCE EDUCATION (SCIE)

**SCIE 551 TEACHING SCIENCE IN EARLY CHILDHOOD (2)** Course is designed to familiarize the student with appropriate methods and materials in science for the young child. Emphasis will be on interdisciplinary approach. Prerequisite: ECED 341 or concurrently.

**SCIE 570-575 SEQUENTIAL SCIENCE MODULES FOR THE ELEMENTARY SCHOOL TEACHER I-VI (1-3)** Three different modules of science instruction will be offered each semester for teachers of primary and intermediate grades. The course will emphasize instructional strategies in both the process and content of the science. A student may elect to take one, two or all three modules for 1, 2 or 3 credits respectively. All students must attend the first class meeting for course orientation. Thereafter, each module will meet once a week for four weeks. Each meeting will consist of approximately 4 hours laboratory work. Prerequisite: Teaching experience in the elementary schools.

**SCIE 576 TEACHING SCIENCE IN THE ELEMENTARY SCHOOL (3)** Application, analysis and integration of science teaching skills in the elementary classroom. Field experience in local schools. Taken concurrently with BIOL 303 and PHSC 303.

**SCIE 580 TEACHING SCIENCE IN THE SECONDARY SCHOOLS (3)** Selection of appropriate content, method and evaluation techniques, analysis of textbooks and resource materials for teaching science in the middle and high schools. Must be taken the

semester prior to student teaching. Prerequisite: SCED 341 or ELED 363.

**SCIE 670-679 SPECIAL TOPICS IN SCIENCE EDUCATION (1-4)** Selected topic in science education. Prerequisite: Varies with topic.

**SCIE 685 SEMINAR IN ELEMENTARY SCHOOL SCIENCE (3)** Practices and trends in organizing, teaching and improving programs in elementary school science. Prerequisite: Elementary teaching.

## SECONDARY EDUCATION (SCED)

**SCED 518 YOUNG ADULT LITERATURE (3)** Literature as expression of basic needs and ideas of youth through independent reading; criteria and aids for evaluation and selection of books and other media. Not open to those who have completed EDUC 418/518.

**SCED 557 METHODS OF TEACHING ENGLISH AS A SECOND LANGUAGE (3)** Teaching teachers methods of teaching English as a second language. Attention is given to the use of visuals, contractive analysis, drill techniques and other methods and resources. Prerequisite: Teaching experience or consent of instructor.

**SCED 558 WRITING AS A LEARNING TOOL IN THE SECONDARY SCHOOL (3)** Strategies for using writing to learn content in all disciplines; examination of the writing process: diagnosis, prewriting, drafting, revision, evaluation and publication. Prerequisites: SCED 341 and SCED 319, or consent of instructor.

**SCED 560 USING READING AND WRITING IN THE SECONDARY SCHOOL (4)** Developmental reading and writing, assessment, vocabulary building, comprehension, special needs adaptations and clinical practice. Prerequisite: SCED 341 or concurrently; written permission from the Department of Secondary Education chairperson. (Written



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permission not required for part-time evening students.)

**SCED 561 TEACHING READING IN THE SECONDARY CONTENT AREAS (3)** Application and assessment of reading strategies and instructional frameworks in secondary content classroom. Prerequisite: SCED 560 and currently teacher or student.

**SCED 563 DEVELOPMENTAL READING FOR THE EARLY ADOLESCENT (3)** Methods of designing and teaching developmental reading programs for the middle or junior high school student. Attention to the following: providing for individual differences, teaching students to read critically, developing and extending reading interests. Prerequisite: SCED 460 or equivalent reading methods course.

**SCED 570-579 SPECIAL TOPICS IN SECONDARY EDUCATION:** (Topic to be named) (1-3) In-depth study of a selected topic in secondary or adult education. Specific requirements and prerequisites will vary with each topic and will be designated by the department each time a topic is scheduled. Graduate credit only with approval of the graduate program director. Each topic may be taken as a separate course.

**SCED 594 TRAVEL AND STUDY IN SECONDARY EDUCATION (1-6)** Study abroad of educational facilities, programs or practices, or selected projects in education topics. By special arrangement with program chairperson and sponsoring instructor. Consent of graduate program director required for graduate credit.

**SCED 595 INDEPENDENT STUDY IN EDUCATION: SECONDARY (1-4)** An opportunity for specially qualified students to undertake research problems or study projects relevant to their interest and training under the direction of a staff member. Prerequisite: Consent of graduate program director.

**SCED 596 DIRECTED READING IN SECONDARY EDUCATION (1-4)** Independent reading in selected areas of secondary education in order to provide a comprehensive coverage for the individual, or to meet special needs. By invitation of the department to qualified students. Prerequisite: Consent of graduate program director.

**SCED 603 TEACHING WRITING ACROSS THE CURRICULUM (3)** The process of writing, given for specific school systems, by the Maryland Writing Project. Small group and assessment techniques included. Prerequisite: Bachelor's degree and teaching experience. Graduate credit only with approval of the graduate program director.

**SCED 605 THEORY, RESEARCH AND PRACTICE IN TEACHING COMPOSITION (6)** The teaching of writing skills, K-university and across disciplines; training of participants to become Maryland Writing Project teacher consultants. Prerequisite: Bachelor's degree and teaching experience; consent of Maryland Writing Project director.

**SCED 611 INCLUSION STRATEGIES FOR SPECIAL-NEEDS ADOLESCENTS AND ADULTS (3)** Curriculum adaptation, teaching strategies, working with resource teachers, aides, service providers; developing and implementing Individualized Education Programs (IEP), and transition plans. Prerequisite: Teaching experience and 3 credits special education or consent of instructor.

**SCED 621 INDIVIDUALIZING LEARNING IN THE SECONDARY SCHOOL (3)** Philosophical and psychological bases; goal development; organizational patterns; assessment; teaching strategies in content areas; grading and evaluation; programming for classroom, departmental and school levels. Prerequisite: Teaching experience.

**SCED 623 THE MIDDLE SCHOOL (3)** Functions and characteristics, historical development, philosophical and psychological



bases, nature of youth, and curriculum and organizational patterns.

**SCED 625 TEACHING IN THE MIDDLE SCHOOL (3)** Goals and objectives, planning, instructional procedures and materials, evaluation techniques, and special problems of instructing preadolescents. Prerequisite: Teaching experience.

**SCED 627 TRAINING STRATEGIES IN THE WORKPLACE (3)** Teaching/learning dimensions of adults in nontraditional settings - business, industry, government and the nonprofit sector. Prerequisite: Business or personnel experience, or consent of instructor.

**SCED 631 THE COMMUNITY COLLEGE (3)** Historical development, purposes and goals, curriculum evaluation, finance, accreditation and trends, state and national patterns and current student needs. Prerequisite: Consent of instructor.

**SCED 633 CURRICULUM AND INSTRUCTION IN THE COMMUNITY COLLEGE (3)** Educational programs, curricula, instructional techniques, evaluative procedures, community involvement and societal expectations, concerns and trends affecting programs, and objectives as related to institutional goals. Prerequisite: SCED 631 or equivalent.

**SCED 635 DISCIPLINE AND CLASSROOM MANAGEMENT IN SECONDARY SCHOOLS (3)** Theories of pupil behavior and effective discipline, procedures and routines for efficient classroom management, discipline problems in urban and suburban schools, and solutions to discipline problems. Prerequisite: Teaching experience or completion of student teaching.

**SCED 643 THE ADMINISTRATION OF THE SECONDARY SCHOOL (3)** Principles and practices, administrator's roles and responsibilities, human relations and personnel management of the school unit and curriculum. Prerequisite: Three years teaching experience.

**SCED 647 ADVANCED TEACHING AND LEARNING PROCESSES, SECONDARY (3)** Theory and research on models of teaching and learning, systems for analyzing modalities, including brain hemispheric preferences and metacognitive strategies. Prerequisite: Teaching experience or consent of instructor.

**SCED 649 TEACHING GIFTED STUDENTS IN THE SECONDARY SCHOOL (3)** Characteristics of gifted adolescents, role of the gifted in society, educational programs, identification procedures, administrative arrangements, curriculum and methodology.

**SCED 651 TECHNIQUES FOR TEACHING SPECIAL-NEEDS ADOLESCENTS AND ADULTS (3)** Assessment, diagnostic and remedial strategies, and motivational devices for adolescents and adults of below-average mental ability as defined under IDEA. Prerequisite: Teaching experience, student teaching or consent of instructor.

**SCED 670-674 SPECIAL TOPICS IN SECONDARY EDUCATION (1-3)** In-depth study of a selected topic. Specific requirements and prerequisites vary as designated by the department. Prerequisite: Consent of graduate program director.

**SCED 683 STAFF DEVELOPMENT AND SUPERVISORY PRACTICES IN SECONDARY SCHOOLS (3)** Roles of the supervisor, theories and practices. Prerequisite: Current teaching experience.

**SCED 695 INDEPENDENT STUDY IN EDUCATION: SECONDARY (1-4)** Independent study in selected areas of secondary education. Prerequisite: Consent of instructor.

**SCED 696 DIRECTED READING IN SECONDARY EDUCATION (1-4)** Independent reading in selected areas of secondary education. Prerequisite: Consent of instructor.

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**SCED 731 FIELD EXPERIENCES IN ADOLESCENT OR ADULT LEARNING DISABILITIES (3)** Observation and analysis of adolescents or adults with learning disabilities, assessment strategies, design of remedial activities, evaluation of observed teaching/learning strategies, and preparing written reports of observations. Prerequisite: One course in special education or learning disabilities, and approval of instructor.

**SCED 741 CURRICULUM DEVELOPMENT IN THE SECONDARY SCHOOL (3)** Principles and practices, significant historical and contemporary influences, objectives, content and evaluation, trends, and teachers as curriculum developers and implementers. Prerequisite: Consent of instructor.

**SCED 751 SEMINAR IN MIDDLE SCHOOL CURRICULUM (3)** Curriculum designs and programs, organization for instruction, teacher preparation programs, guidance and nature of middle school students, community involvement and evaluation. Prerequisite: Middle school teaching experience or consent of instructor.

**SCED 753 SEMINAR IN SECONDARY SCHOOL CURRICULUM (3)** Theories, research and evaluation; analysis of present programs; rationale for program development and change. Prerequisite: Graduate course in curriculum.

**SCED 770-774 SPECIAL TOPICS IN SECONDARY EDUCATION (1-3)** In-depth study of a selected topic. Specific requirements and prerequisites vary as designated by the department. Prerequisite: Consent of graduate instructor.

**SCED 779 SEMINAR IN SECONDARY SCHOOL SOCIAL STUDIES (3)** Current research, trends, practices, issues, content, materials and problems. Prerequisite: Teaching experience in social studies.

**SCED 781 SEMINAR IN SECONDARY AND ADULT EDUCATION (3)** Investigation of a current topic, approved by University

Institutional Review Board, of a problem or issue affecting teachers, students or parents. Prerequisites: Completion of EDUC 761 and 21 credits of graduate work.

**SCED 797 INTERNSHIP IN SECONDARY ADMINISTRATION/SUPERVISION (3)** Supervised field experience in secondary school settings, focusing on roles and responsibilities of administrators and supervisors. Prerequisites: Completion of SCED 741, SCED 683, SCED 643 and written approval by school administrator and university supervisor of proposed leadership activities.

**SCED 898 MASTER'S THESIS IN SECONDARY EDUCATION (6)**

**SCED 899 THESIS CONTINUUM (1)**

## **SOCIOLOGY (SOCI)**

**SOCI 511 INDIVIDUAL AND SOCIETY (3)** A social psychological approach to the interrelationships of the individual and his/her social and cultural environment; behavioral characteristics resulting from social experience. Prerequisite: SOCI 101.

**SOCI 523 SOCIAL CHANGE (3)** A sociological analysis of the sources, processes and consequences of social change. Prerequisite: SOCI 101.

**SOCI 525 CROWDS, MOBS AND RIOTS (3)** Study of unorganized and organized groups and their impact on society; crowds, mobs, riots and other processes of disruptive and constructive change. Prerequisite: SOCI 101.

**SOCI 527 URBAN SOCIOLOGY (3)** Survey of the theoretical and sociological conceptualizations of modern Western industrial cities. Prerequisite: SOCI 101.

**SOCI 529 DEMOGRAPHY (3)** Social, economic and political problems related to changes, distribution and movement of pop-

ulation; analysis of contemporary population trends in the United States and the world. Prerequisite: SOCI 101.

**SOCI 531 DEVIANCE AND ORGANIZATIONS (3)** Major social patterns associated with contemporary large-scale organizations, with special emphasis on organizational deviance by and within corporations, governments and crime syndicates. Prerequisite: SOCI 101.

**SOCI 533 POLITICAL SOCIOLOGY (3)** Contemporary relevance of the fundamental ideas regarding the relationship of the social and political systems; the significance of social and political democratization; class struggles and revolution; the influence of government bureaucracy. Prerequisite: SOCI 101.

**SOCI 535 MEDICAL SOCIOLOGY (3)** A study of social and cultural perspectives on illness, demographic trends, the health professions, institutions for the delivery of health care services. Prerequisite: SOCI 101.

**SOCI 541 CLASS, STATUS AND POWER (3)** Examination of major theories and significant research on socially structured inequality in modern and traditional societies. Prerequisite: SOCI 101.

**SOCI 543 MINORITY GROUPS (3)** Examination of intergroup life as an aspect of society; conflicts between races, ethnic groups, and minorities; prejudice, segregation and integration. Prerequisite: SOCI 101.

**SOCI 551 DEVIANT BEHAVIOR (3)** Deviance as a process in society. Understanding conformity and deviance; identification and labeling of deviants; and society's response to deviant behavior. Prerequisite: SOCI 101.

**SOCI 553 THEORIES OF CRIME (3)** Evolution of criminological theory; crime rates and trends; social profile of criminal offenders and victims; societal responses. Prerequisite: SOCI 101.

**SOCI 554 INTRODUCTION TO CRIMINAL JUSTICE (3)** The history, the present structure, the functions, and the contemporary problems of the police, prosecution, courts, corrections, probation and parole. In addition, a brief introduction to law as an element of social control. Prerequisite: SOCI 101.

**SOCI 555 DELINQUENCY AND JUVENILE JUSTICE (3)** Nature, distribution and causes of youth crime, youth gangs, the juvenile justice system. Prerequisite: SOCI 101.

**SOCI 556 PRISONS IN AMERICA (3)** Purposes of punishment, incarceration and death penalty; inmate subculture; administration and staff issues. Prerequisite: SOCI 553, SOCI 554 or SOCI 555.

**SOCI 557 SOCIAL WELFARE (3)** Sociological analysis of social welfare institutions and the functions they perform within modern societies. Prerequisite: SOCI 101.

**SOCI 558 SOCIOLOGY OF DEATH, DYING AND BEREAVEMENT (3)** Examination of present social considerations on death, including demographic, attitudinal and ritualistic variables; death education through the life cycle; structure of the grief process; impact of terminal illness on the patient and the family; ethical issues surrounding euthanasia and suicide. Prerequisite: SOCI 101.

**SOCI 559 SOCIAL GERONTOLOGY (3)** Examination of social factors in aging in later life and responses to aging; evaluation of research in social gerontology. Prerequisite: SOCI 101.

**SOCI 560-569 TOPICS IN SOCIOLOGY (3)** Current topics in sociology designed for non-majors as well as majors. May be repeated for credit provided a different topic is covered. The content of the course will depend upon mutual faculty and student interest. Prerequisites: SOCI 101 and 6 additional credits of sociology.

**SOCI 570-579 SPECIAL TOPICS IN SOCIOLOGY (3)** Current topics in sociology at the most specialized level. May be repeated for credit provided a different topic is covered. Prerequisites: SOCI 101 and 6 additional credits of sociology.

**SOCI 581 SOCIOLOGICAL THEORY (3)** Major systems of sociological theory; the works, assumptions, and implications of major European and American schools. Prerequisites: SOCI 101; 9 additional credits of sociology.

**SOCI 582 RESEARCH METHODS (3)** A consideration of methodology of sociological research; the various steps in conducting research projects, from statement of the problem to final analysis of data. Prerequisites: SOCI 101; 9 additional credits of SOCI; either PSYC 212 or MATH 231.

**SOCI 585 SEMINAR IN SOCIOLOGY (3)** Capstone application of ideas, methods, and facts learned in previous sociology courses. Prerequisites: SOCI 101; 9 additional credits of SOCI, and permission of the instructor.

**SOCI 591-592 INTERNSHIP IN SOCIOLOGY I and II (3, 3)** Supervised experience in work setting which facilitates understanding of roles and relationships relevant to sociological inquiry and application of sociological knowledge. Students may elect to take one semester for 3 credits (591) or two semesters for 3 credits each (591-592), in one agency both semesters or in a different agency each semester. No more than 3 credits may be earned in a semester except with consent of the chair, which will be granted only when agency requirements and student needs make it appropriate. Prerequisite: Consent of internship coordinator.

**SOCI 595 INDEPENDENT RESEARCH (3)** Supervised research and sociological investigation involving library and/or field experiences, and culminating in a written report. Prerequisites: SOCI 581, SOCI 582 and consent of instructor.

## SPANISH (SPAN)

**SPAN 502 SPANISH LINGUISTICS (3)** Linguistic structure of the Spanish language with an introduction to transformational grammar. Conducted in Spanish. Prerequisites: SPAN 301 and SPAN 302, or equivalent.

**SPAN 511 NINETEENTH-CENTURY SPANISH NOVEL I (3)** Emphasis will be given to Benito Perez Galdos and Pio Baroja. Conducted in Spanish. Prerequisite: SPAN 321 or SPAN 322 (not open to students who have completed SPAN 471).

**SPAN 512 CONTEMPORARY SPANISH NOVEL (3)** Emphasis on such writers as Cela, Sender, Delibes and Goytisolo. Conducted in Spanish. Prerequisites: SPAN 321 and SPAN 322, or equivalent (not open to students who have completed SPAN 472).

**SPAN 517 THE GOLDEN AGE IN SPANISH LITERATURE I (3)** Principal attention to Cervantes, Tirso de Molina, Lope de Vega and Ruiz de Alarcon; Gongora and his role. Conducted in Spanish. Prerequisites: SPAN 321 and SPAN 322, or equivalent.

**SPAN 531 NINETEENTH-CENTURY SPANISH LITERATURE (3)** The main literary movements of the century: neoclassicism, romanticism, realism, naturalism and special emphasis on "costumbrismo." Conducted in Spanish. Prerequisites: SPAN 321 and SPAN 322, or equivalent.

**SPAN 536 NINETEENTH-CENTURY SPANISH AMERICAN LITERATURE II (3)** Principal works of the major writers from 1860 to 1900. Conducted in Spanish. Prerequisites: SPAN 321 and SPAN 322, or equivalent.

**SPAN 544 TWENTIETH-CENTURY SPANISH-AMERICAN LITERATURE II (3)** The Contemporary Period. Conducted in Spanish. Prerequisites: SPAN 321 and SPAN 322, or equivalent.



**SPAN 552 CONTEMPORARY SPANISH POETRY II (3)** Emphasis on the poets of the generation of 1927; Pablo Neruda, and Vicente Aleixandre. Conducted in Spanish. Prerequisites: SPAN 321 and SPAN 322, or equivalent.

**SPAN 562 CONTEMPORARY SPANISH DRAMA (3)** Contemporary playwrights such as Casona, Usigli and Vallejo. Conducted in Spanish. Prerequisites: SPAN 321 and SPAN 322, or equivalent.

**SPAN 570-579 SPECIAL TOPICS IN SPANISH (3)** Discussion of a central topic with changing emphasis from year to year. Prerequisites: SPAN 321 and SPAN 322, or equivalent.

**SPAN 581 SPANISH SHORT STORY (3)** The short story in Spain and Spanish America with emphasis on 20th-century authors. Conducted in Spanish. Prerequisites: SPAN 321 and SPAN 322, or equivalent.

**SPAN 591-592 DIRECTED READINGS IN SPANISH (1-3)** Reserved for superior students under the guidance of a departmental adviser. Conducted in Spanish. Prerequisite: Graduate standing.

**SPAN 605 SPANISH STYLISTICS (3)** Intensive and detailed analysis of selected texts. Prerequisite: Undergraduate degree in Spanish or consent of department chairperson.

**SPAN 636 POETRY AND DRAMA OF THE SPANISH GOLDEN AGE (3)** Graduate study of major writers of the Siglo de Oro. Conducted in Spanish. Prerequisite: Undergraduate degree in Spanish or consent of department chairperson.

**SPAN 653 MIGUEL DE CERVANTES (3)** Don Quijote de la Mancha and the Novelas Ejemplares, reading and detailed analysis. Prerequisite: Undergraduate degree in Spanish or consent of department chairperson.

**SPAN 670-679 SPECIAL TOPICS IN SPANISH LANGUAGE: LITERATURE AND CIVILIZATION (3)** Discussion of a central topic with changing emphasis from year to year. Prerequisite: Undergraduate degree in Spanish or consent of department chairperson.

**SPAN 685 SEMINAR IN MODERN LITERATURE (3)** Discussion of a figure or topic in modern Spanish or Spanish-American literature. Prerequisite: Undergraduate degree in Spanish or consent of department chairperson.

## SPECIAL EDUCATION (SPED)

**SPED 502 CURRICULUM/METHODS OF INCLUSION (3)** Designing and implementing inclusive programs. Prerequisite: SPED 301.

**SPED 513 ASSISTIVE TECHNOLOGY FOR STUDENTS WITH DISABILITIES K-12 (3)** Designing instruction for students with disabilities using assistive and instructional technology. Prerequisite: SPED 301 and ISTC 201, or equivalent.

**SPED 515 ASSESSMENT OF INFANT/PRIMARY STUDENTS WITH DISABILITIES (3)** Comprehensive assessment of young children and linking evaluative information to inclusive programming. Prerequisite: SPED 425/525.

**SPED 517 COLLABORATIVE PLANNING FOR INFANT/PRIMARY PROGRAMS (3)** Methods and models of interdisciplinary collaborative planning for young children with disabilities. Prerequisite: SPED 301.

**SPED 525 FORMAL TESTS AND MEASUREMENTS FOR STUDENTS WITH DISABILITIES K-12 (3)** Assessment techniques, philosophical rationale, current research, and intervention strategies for mildly and moderately handicapped children.

## 220 COURSE DESCRIPTIONS

Prerequisites: 6 credits of psychology and 9 credits of special education, or consent of instructor.

**SPED 527 CURRICULUM/METHODS OF SOCIAL, EMOTIONAL AND MOTOR DEVELOPMENT FOR STUDENTS WITH DISABILITIES K-12 (3)** Curriculum theory, research, and instructional techniques for student with disabilities. Prerequisite: 6 credits of special education or consent of instructor.

**SPED 531 CURRICULUM AND METHODS OF READING FOR PRIMARY STUDENTS WITH DISABILITIES (3)** Reading practices, context, procedures, materials and assessment for primary students with disabilities. Prerequisite: SPED 301.

**SPED 541 CURRICULUM/METHODS OF INSTRUCTION FOR STUDENTS WITH DISABILITIES (K-12) (3)** Characteristics that affect learning, and the design of educational programs. (Observation in appropriate setting and guest lecturers in specialty area.) Prerequisites: 6 credits in psychology and 6 credits in education.

**SPED 551 PSYCHOEDUCATIONAL ASSESSMENT OF STUDENTS WITH DISABILITIES ELEMENTARY/MIDDLE SCHOOL (3)** Assessment and intervention for cognitive, educational, emotional and social behaviors of students with disabilities (Special permit required). Prerequisites: SPED 301, 425/525/430.

**SPED 553 CURRICULUM AND METHODS OF SECONDARY SPECIAL EDUCATION PREVOCAONAL AND VOCATIONAL INSTRUCTION (3)** Issues and trends including transition-related instruction, post-secondary programs and adaptability in secondary classrooms. Prerequisites: SPED 301, SCED 357 and MATH 423 or SCIE 380, or permission of the instructor.

**SPED 555 ASSESSMENT OF MIDDLE AND HIGH SCHOOL STUDENTS WITH DISABILITIES (3)** Diagnosis and prescrip-

tive techniques used by secondary level special education professionals. Prerequisite: SPED 301.

**SPED 581 METHODS AND MATERIALS FOR TEACHING THE VISUALLY IMPAIRED (3)** Examination of recognized methods, materials, and programs for teaching children who are visually impaired. Offered in cooperation with Maryland School for the Blind. Prerequisite: SPED 483 and consent of instructor.

**SPED 583 BRAILLE READING AND WRITING (3)** Designed to meet needs of teachers who will be teaching the visually impaired to read and write Braille. Consent of instructor.

**SPED 601 SPECIAL EDUCATION: ISSUES IN TRANSITION FROM SCHOOL TO ADULT LIFE (3)** Methodologies for transition for students with disabilities from school to employment and adult life. Prerequisite: SPED 301 or consent of instructor.

**SPED 603 INFORMAL TESTS AND MEASUREMENTS FOR STUDENTS WITH DISABILITIES K-12 (3)** Assessment, diagnosis, prescriptive techniques; procedures, administration, interpretation and programming. Prerequisite: SPED 301 and consent of department.

**SPED 605 WORKING WITH FAMILIES OF STUDENTS WITH DISABILITIES (3)** Communication skills, human relations, parent counseling and conferencing. Prerequisite: SPED 301 and consent of department.

**SPED 607 CURRICULUM/METHODS OF CLASSROOM MANAGEMENT FOR STUDENTS WITH DISABILITIES (K-12) (3)** Theoretical foundations and development of practical intervention. Prerequisite: SPED 301 and consent of instructor.

**SPED 637 INCLUSION FOR THE CLASSROOM TEACHER (3)** Background and legal bases, programs, methods and materials for special-needs children, and emphasis

on the regular classroom. Prerequisite: Student teaching or consent of instructor.

**SPED 641 EDUCATION OF STUDENTS WITH DISABILITIES: CURRICULUM AND METHODS OF INSTRUCTION (K-12) (3)** Theory, research, instructional and behavioral strategies, classroom management, crisis intervention and parent conferencing. Prerequisites: ECED 509; SPED 441 or equivalent; 6 credits in psychology.

**SPED 670-679 SPECIAL TOPICS IN SPECIAL EDUCATION (1-3)** Studies in selected content areas tailored to student needs. Prerequisite: Varies according to area of concentration; consent of department.

**SPED 741 INTERNSHIP — STUDENTS WITH DISABILITIES (3)** Placement in a special education facility or special education agency according to student interest and background. Prerequisites: 6 credits in special education and 12 credits in early childhood education; 6 credits psychology and consent of department.

## **SPEECH-LANGUAGE PATHOLOGY (SPPA)**

**SPPA 509 INTRODUCTION TO DEAF-BLINDNESS (2)** An orientation to the lives of people with both hearing and vision loss. Includes methods for communicating, techniques for guiding, and information on assistive technology. Prerequisites: SPPA 205, 206 and 345/545.

**SPPA 525 INTRODUCTION TO AURAL REHABILITATION (3)** Options available for managing children and adults who are deaf or hard of hearing. Early intervention, communication strategies, amplification options and psychosocial issues. Prerequisite: SPPA 321 and/or consent of the department.

**SPPA 545 PSYCHOSOCIAL ASPECTS OF DEAFNESS (3)** Educational, legal, philo-

sophical, cultural, and political influences relating to the deaf/hard of hearing. Impact of pre-lingual and post-lingual deafness on an individual's social and psychological functioning. Prerequisite: SPPA 205 and/or consent of the department.

**SPPA 602 FOUNDATIONS OF COMMUNICATION: DEVELOPMENTAL PSYCHO LINGUISTICS (3)** Neurolinguistic and psycholinguistic aspects of normal language acquisition including the cognitive domain and multicultural variables in children from birth through school age. Prerequisite: Consent of department (not open to students who have completed SPPA 701).

**SPPA 604 NEUROLOGICALLY BASED LANGUAGE DISORDERS (3)** Neuroanatomical models regarding language function, theories concerning brain function and localization of lesion following cerebral vascular accident and/or degeneration. Assessment and treatment of language deficits. Prerequisite: Graduate standing.

**SPPA 606 LANGUAGE DISORDERS IN CHILDREN (3)** Characteristics of language disorders, assessment and intervention techniques for children and adolescents including the culturally linguistically different and specific-disorder populations. Prerequisite: SPPA 602.

**SPPA 610 PHONOLOGY AND ARTICULATION (3)** Universal phonological principles and linguistic analysis. Assessment and treatment of phonological and articulation disorders. Prerequisite: Graduate standing and consent of department.

**SPPA 614 FLUENCY DISORDERS (3)** Information on the nature of fluency and the etiology and treatment of fluency disorders through the life span. Prerequisite: Graduate standing and consent of department (not open to students who have completed SPPA 619).

**SPPA 620 VOICE DISORDERS IN CHILDREN AND ADULTS (3)** Anatomy and physiology of the vocal mechanism with discussion and identification of abnormal voice qualities. Techniques of treatment and counseling of clients with organic and functional voice disorders. Prerequisite: Graduate standing and consent of department (not open to students who have completed SPPA 615).

**SPPA 622 DIAGNOSTIC PROCESS IN SPEECH-LANGUAGE PATHOLOGY (3)** The diagnostic process in communication disorders of children and adults will include aspects of the process from a philosophy of assessment and information gathering to tools of assessment and individualized treatment planning. Prerequisite: Graduate standing and consent of department (not open to students who have completed SPPA 607).

**SPPA 626 NEUROLOGICALLY BASED SPEECH DISORDERS (3)** Neuroanatomical models regarding speech motor control, theories concerning brain function and localization of neurologic deficits following trauma or degeneration, and assessment and treatment of neurologically based speech disorders. Prerequisite: Graduate standing.

**SPPA 628 DYSPHAGIA (2)** Anatomy and physiology of normal and abnormal swallowing. Etiology, assessment and treatment of swallowing disorders. Prerequisite: SPPA 626 and/or consent of department.

**SPPA 634 COMMUNICATION DISORDERS OF MULTI-HANDICAPPED CHILDREN (2)** Causes and characteristics of multi-handicapping conditions and communication assessment/intervention strategies for children (0-21 years). The role of the speech-language pathologist and audiologist on the interdisciplinary team. Prerequisite: Graduate standing and consent of department.

**SPPA 670-679 SPECIAL TOPICS SEMINAR IN SPEECH-LANGUAGE PATHOL-**

**OGY (3)** Investigation of particular topics in the field of speech and language pathology. Topic varies each semester the course is offered. Prerequisite: Varies with topic.

**SPPA 690 CLINICAL PRACTICUM ON-CAMPUS (3)** Supervised clinical experience in the university clinical facility with children and adults who have communication impairments. Prerequisite: Completed communication screening, SPPA 416 (or equivalent documentation of a minimum of 25 hours observation); graduate standing and/or consent of the department.

**SPPA 705 PROFESSIONAL ISSUES IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY (3)** Information on the organization, administration, and evaluation of speech-language pathology and audiology programs in universities, schools and other settings. Professional roles in supervision, direct clinical service and consultation. Federal and state laws related to the special education process and licensure will be presented. Prerequisite: Graduate standing and consent of department.

**SPPA 706 FAMILY-CENTERED EARLY INTERVENTION (2)** Theoretical and research information on the role of the parent(s) and other family members in the acquisition and development of communication abilities and their influence on the occurrence and maintenance of communication disorders. Nature of family units, multicultural families, and methods of working with families to prevent, assess, and treat communication disorders in very young children (0-3 years.). Prerequisite: Consent of department and graduate standing (not open to students who have taken this title as special topics).

**SPPA 713 SEMINAR: RESEARCH DESIGN IN SPPA (3)** Scientific method as applied to research SPPA; evaluation of research designs; development and implementation of a research project; and organization, analysis and presentation of data. Prerequisite: Graduate standing and consent of department.



**SPPA 714 AUGMENTATIVE AND ALTERNATIVE COMMUNICATION (2)** Compensatory or augmentative use of various nonspeech communication modes with persons whose impairments prevent effective verbal communication. Prerequisite: Graduate standing and consent of department.

**SPPA 718 SPEECH PERCEPTION (2)** Acoustical and perceptual aspects of speech including developmental aspects of perception and spectral characteristics of vowel and consonants. Prerequisite: Graduate standing and consent of department (not open to students who have completed SPPA 618).

**SPPA 745 ADVANCED CLINICAL PRACTICUM ON-CAMPUS (3)** Supervised practicum experience includes the evaluation and treatment of various types of speech and language disorders. Prerequisites: SPPA 690 and/or consent of department.

**SPPA 746 ADVANCED CLINICAL PRACTICUM OFF-CAMPUS (3)** Advanced clinical practice in the identification, assessment, and/or treatment of various types of speech and language disorders in programs affiliated with TU Department of Communication Sciences and Disorders. Prerequisites: SPPA 745, 50 graduate clock hours and/or consent of department.

**SPPA 747 ADVANCED CLINICAL PRACTICUM IN SCHOOLS (3)** Advanced clinical practicum in school programs affiliated with TU for graduate students in speech-language pathology. The experience includes the evaluation and treatment of various types of speech and language disorders. Prerequisites: SPPA 745, 50 graduate clock hours and/or consent of department.

**SPPA 748 ADVANCED PEDIATRIC PRACTICUM (3)** Advanced clinical practice in the identification, assessment and/or treatment of various types of speech and language disorders in pediatric programs affiliated with the Department of Communication Sciences and Disorders. Prerequisites: SPPA

745, 50 graduate clock hours and/or consent of department.

**SPPA 796 INDEPENDENT STUDY IN SPEECH-LANGUAGE PATHOLOGY (1-3)** Investigation in selected area of speech-language pathology. Prerequisite: Graduate standing and consent of department.

**SPPA 797 DIRECTED READINGS IN SPEECH-LANGUAGE PATHOLOGY (1-3)** Readings in particular topic in speech-language pathology. Prerequisites: Graduate standing and consent of department.

**SPPA 798 ADVANCED CLINICAL PRACTICUM CONTINUUM ON-CAMPUS (3)** Advanced clinical practicum for students in the Speech-Language Pathology Program continuing in on-campus practicum experiences previously taken for credit. Supervised practicum experience includes the evaluation and treatment of various types of speech and language disorders. Prerequisite: SPPA 745 and/or consent of the department.

**SPPA 799 CLINICAL PRACTICUM CONTINUUM OFF-CAMPUS (3)** Advanced clinical practicum for students in the Speech-Language Pathology Program continuing in off-campus experiences previously taken for credit. Supervised practicum experience includes the evaluation and treatment of various types of speech and language disorders. Prerequisite: Prior off-campus practicum placement and/or consent of department.

**SPPA 898 THESIS (6)** Original investigation using an acceptable research method and design conducted under the direction of a faculty committee. Prerequisite: SPPA 713.

**SPPA 899 THESIS CONTINUUM (1)**

## **THEATRE ARTS (THEA)**

**THEA 580 ADVANCED COSTUME DESIGN STUDIO (1-9)** Independent studio in costume, scenery or lighting design. May be

repeated for a maximum of 9 credits. Prerequisite: Consent of instructor.

**THEA 593 ADVANCED STUDY IN THEATRE (1-9)** Independent study of an academic or creative nature, for majors only. May be repeated for a maximum of 9 credits. Prerequisite: Approval of plan of study by instructor and director of theatre.

**THEA 601 DRAMATURGY: INTERDISCIPLINARY (3)** Investigation of the theory and techniques of combining disciplines for performance. Considerations of the issues of interdisciplinary performance.

**THEA 602 DRAMATURGY: INTERCULTURAL (3)** Investigation of the theory and techniques of theatrical performance in various cultures, as well as forms which incorporate a variety of cultural practices. Consideration of the issues of intercultural performance.

**THEA 603 PERFORMANCE: SOLO (1-4)** Creating solo performance by exploring language and environment through a variety of traditions, styles and techniques. May be repeated for up to 12 credits. Prerequisite: Consent of graduate program director.

**THEA 604 GRADUATE COSTUME DESIGN I (2 OR 4)** Costume design through integrated seminars with directors, actors and designers to create original styles for productions. Prerequisite: Consent of instructor.

**THEA 605 PERFORMANCE: ENSEMBLE (1-4)** Creating collaborative performance by exploring language and environment through a variety of traditions, styles and techniques. May be repeated for up to 12 credits. Prerequisite: Consent of graduate program director.

**THEA 606 VOICE/MOVEMENT INTEGRATION (3)** Interrelationship of vocal production, physical alignment, dynamic movement and affective expression. Prerequisite: Consent of instructor.

**THEA 607 SELF-EMPOWERMENT IN THEATRE (3)** Entrepreneurial management strategies for a self-empowered life in theatre. Prerequisite: Consent of program director.

**THEA 608 THEATRE DESIGN TECHNIQUES (3)** The vocabulary and background needed to develop and communicate design concepts, to work collaboratively with other design artists, and to understand the needs of designing for different sizes and types of venues. Prerequisite: Approval of instructor.

**THEA 609 TEXT CONSTRUCTION (3)** Exploring a variety of means of developing theatrical text, with special attention to the relationship of language and structure. Prerequisite: Permission of instructor.

**THEA 610 THEATRE SYSTEMS (3)** A practical overview of technology. Prerequisite: Theatre graduate student; undergraduate: permission of instructor.

**THEA 675 RESEARCH METHODS (3)** Examining the text and context of performance, using a variety of theoretical methodologies. Prerequisite: Consent of instructor.

**THEA 680-683 SPECIAL TOPICS (1-4)** In-depth study in a selected area dependent upon faculty and student interest. May be repeated for a total of no more than 16 credits. Prerequisite: Consent of instructor.

**THEA 695 INDEPENDENT PROJECT IN THEATRE (1-9)** Independent project in research, acting, directing or theatre production. May be repeated for a maximum of 9 credits. Prerequisite: Consent of instructor.

**THEA 710 TEACHING INTERNSHIP (3)** Assisting a faculty mentor with the teaching of an undergraduate theatre course. Prerequisite: Consent of department chairperson, graduate program director and instructor.

**THEA 720 GRADUATE DIRECTING (3)** Development of directorial vision, emphasizing collaborative style and advanced problem solving including a directing activity.

**THEA 730 SOUND APPLICATION AND TECHNOLOGY (1-4)** Integration of MIDI systems, digital devices and organic elements. May not be repeated. Prerequisite: Consent of instructor.

**THEA 740 GRADUATE PROJECT LABORATORY (1-4)** Conceptualization, research and development of a graduate performance project. May be repeated for a total of no more than 16 credits. Prerequisite: Consent of graduate program director.

**THEA 750 GRADUATE PROJECT AND PERFORMANCE (1-4)** Execution of a graduate performance project. May be repeated for a total of no more than 16 credits. Prerequisite: Consent of graduate program director.

**THEA 760 INTEGRATED SEMINAR (3)** Working with guest artists to understand and apply specific theatrical aesthetics. May be repeated for a total of no more than 12 credits. Prerequisite: Consent of graduate program director.

**THEA 897 FINAL PROJECT (1-6)** Culminating creative process that includes a research paper, and may include a production or project component.

## WOMEN'S STUDIES (WMST)

**WMST 532 WOMEN'S CULTURE AND CREATIVITY (3)** Study of the historical conditions influencing women's creativity, the nature of women's aesthetic achievements, and the emergence of new female cultural and artistic traditions. Prerequisite: WMST 231 or 232, or permission of instructor.

**WMST 533 WOMEN AND AGING (3)** American society's view of older women and the impact of stereotypes and images on their self-concepts. Prerequisite: 3 credits in women's studies or social sciences.

**WMST 535 WOMEN, WORK AND FAMILY (3)** Women's work examined historically and cross-culturally from an interdisciplinary perspective. Women's work in traditional societies, effect of industrialization on women's work in contemporary societies. Prerequisite: 3 credits in social science or history.

**WMST 536 WOMEN AND MEDICINE (3)** A study of how gender has influenced the structure, content and practice of medicine in the 19th and 20th centuries with emphasis on disease theory and treatment; physicians' involvement in social policy; and focus on the history of nursing, women's entry into medical practice, and women's health movements past and present. Prerequisite: 3 undergraduate credits in women's studies or social sciences.

**WMST 537 FEMINISM (3)** Examination of feminism as a set of ideas, and the systematic application of those ideas to achieve political, social and economic quality. Prerequisite: 3 credits in social sciences or women's studies.

**WMST 538 WOMEN AND SEXUALITY (3)** Examination of the politics of sexuality, the interaction between cultural definitions and evaluations of women's attempts to achieve sexual autonomy. Emphasis on how the meaning of sexuality changes over time, how women respond to these changes, and how they affect women. Prerequisite: 3 undergraduate credits in women's studies or social sciences.

**WMST 539 REPRODUCTIVE TECHNOLOGIES AND THE FUTURE OF MOTHERHOOD (3)** Reproductive science and contraceptive technologies and their effect on contemporary society; focus on ethi-

cal and legal issues, and changing definitions of motherhood. Prerequisites: Two science courses, or one math and one science course.

**WMST 570 TOPICS IN WOMEN'S STUDIES (3)** An interdisciplinary examination of selected issues, themes or topics in women's studies. Variation in content in different semesters; may be reelected. Prerequisite: One women's studies course or consent of instructor.

**WMST 591 DIRECTED READING IN WOMEN'S STUDIES (1-4)** Independent reading in women's studies with emphasis on interdisciplinary relationships. Topics selected by student in consultation with the instructor. May be repeated for a maximum of 6 credits. Prerequisite: 15 credits in interdisciplinary or departmental women's studies courses; minimum 3.00 average in women's studies; consent of instructor and of women's studies.

**WMST 601 WOMEN AND GENDER IN THE WORKPLACE (3)** Examination of the organization of work and the role of gender in the division of labor, power and authority, income and other rewards, in diverse work settings. Prerequisite: WMST 231 or equivalent and graduate standing.

**WMST 602 WOMEN AND COMMUNICATION (3)** To develop students' written and oral communication skills in the context of research on gender and language, and communication strategies in the workplace. Prerequisite: WMST 231 or equivalent, and graduate standing.

**WMST 603 THE DIVERSITY OF WOMEN (3)** Examination of feminist scholarship on race, class and sexualities, particularly with regard to the distribution of power within a variety of institutions. Prerequisite: WMST 231 or equivalent, and graduate standing.

**WMST 605 WOMEN IN AN INTERNATIONAL CONTEXT (3)** Examination of the diverse experiences of women in a variety

of national and international contexts. Particular attention will be devoted to how global forces impact women's lives today and the diverse ways that women struggle against inequality. Prerequisite: WMST 231 or equivalent, and graduate standing.

**WMST 607 ADVANCED FEMINIST THEORY (3)** Major feminist theories on women's experience, emphasizing the areas in the graduate concentrations: workplace, health, public policy and international. Prerequisite: WMST 231 or equivalent, and graduate standing.

**WMST 609 APPLIED RESEARCH METHODS AND SKILLS I (3)** How to interpret, evaluate, and conduct research about women and gender issues in organizations and society, using the computer, the Internet, and statistical software for accessing and producing information. Prerequisite: WMST 231 or equivalent, graduate standing, and adequate computer skills.

**WMST 610 APPLIED RESEARCH METHODS AND SKILLS II (3)** Quantitative and qualitative methods, writing research and grant proposals. Prerequisite: WMST 231, graduate standing, or equivalent.

**WMST 611 WOMEN, PUBLIC POLICY, AND SOCIAL CHANGE (3)** How public policy affects the experiences of women and men, and groups to which they belong. Includes study of components of public policymaking, case studies of gender-related public policy, and methods of instituting change. Prerequisite: WMST 231 or equivalent and graduate standing.

**WMST 613 WOMEN AND HEALTH (3)** An interdisciplinary study of women's health from a holistic perspective that builds on socioeconomic, political and biological aspects of women's health. Prerequisite: WMST 231 or equivalent, and graduate standing.

**WMST 620 FIELD EXPERIENCE (3)** Non-culminating field placement for students in



organizations or agencies (including governmental) working on projects that serve women. Course includes a proposal, regular meetings with adviser, a journal and a final written report of the project. May be repeated once for a maximum of 6 credits by students not electing the 796 Internship option; site of placement may not be repeated.

**WMST 695 INDEPENDENT STUDY (3)** Study and research including writing a research paper on a selected topic in women's studies. Prerequisite: 15 undergraduate or 9 graduate credits in women's studies; graduate standing and consent of women's studies prior to registration.

**WMST 796 INTERNSHIP IN WOMEN'S STUDIES (3)** Intensive hands-on experience in approved organization related to student's concentration. Written report required upon completion. Must be taken in two separate semesters for a total of 6 credits. Prerequisite: Minimum of 9 hours completed in graduate program in Women's Studies and consent of student's graduate adviser.

**WMST 898 THESIS** Original research on a topic related to the student's concentration using acceptable research methods and design. May be based in extensive library, survey or field research. A thesis prospectus detailing the nature and scope of the investigation and the methods to be employed must be submitted to the student's adviser and the graduate director and approved in advance. Students will be required to do an oral presentation of their thesis in a meeting with their graduate adviser and one other WMST faculty. Prerequisites: Completion of a minimum of 21 credit hours toward the M.S. in WMST and completion of WMST 609.

## WRITING (WRIT)

**WRIT 611 RHETORIC: THE PURSUIT OF ELOQUENCE (3)** Concepts of rhetoric, from classical to contemporary, which have shaped persuasive and expository writing.

Prerequisite: Two 600-level writing courses or consent of instructor.

**WRIT 612 RHETORICAL GRAMMAR (3)** Study and analysis of grammar as an extension of rhetorical effectiveness. Practice in adapting grammatical structure to subject and purpose, to audience, and to writer/audience relationship. Prerequisite: Admission to Master's in Professional Writing (MPW) program or consent of instructor.

**WRIT 613 THEORY OF EXPOSITION (3)** Exposition as an empirically based model for factual writing; conventions of diction, sentence form, paragraph and organization; techniques of verifiability and probability; adaptability to different audiences, fields of knowledge, and public purposes; illogical and emotional distortions in expository writing. Prerequisite: Admission to MPW program or consent of instructor.

**WRIT 620 HISTORY AND DEVELOPMENT OF PROSE STYLE (3)** Theory of English prose style from earliest times to the present. Prerequisite: Admission to MPW program or consent of instructor.

**WRIT 617 EDITING (3)** Study of fundamental editing theory and supervised practice in editing. Also practice in copy editing, exposure to electronic editing, overview of copyright and libel laws, and instruction in publication design and production. Prerequisite: Admission to a graduate program or consent of instructor.

**WRIT 619 COMMUNICATION IN THE PROFIT/NONPROFIT SECTORS (3)** Communication process, with special emphasis on writing, within the profit/nonprofit organization. Theories of organization, management styles, and relationship of written messages to the function of climate of the profit/non-profit organization. Strategies of preparing written communication to meet internal and external needs. Prerequisite: Admission to MPW program or consent of instructor.

## 228 COURSE DESCRIPTIONS

**WRIT 621 BUSINESS WRITING (3)** Major forms of business and industrial writing, including correspondence, memoranda, short reports and long reports. Emphasis on audience analysis and planning of written communication to meet audience needs. Prerequisite: Two writing 600-level courses or consent of instructor.

**WRIT 623 TECHNICAL AND SCIENTIFIC WRITING (3)** Intensive workshop in developing and editing technical documents: instructions, feasibility studies, investigation reports, proposals, etc. Prerequisite: WRIT 619.

**WRIT 625 DESIGN, LAYOUT, AND PRODUCTION (3)** A foundation for the writer wishing to master graphic communication. Students will create a portfolio of finished printing, and tour studios, typesetting and printing plants. Prerequisite: WRIT 617 or consent of instructor.

**WRIT 627 MODERN RHETORIC (3)** Current theories of rhetoric and composition, with emphasis upon the cognitive and social aspects of writing; relationships between language and abstraction, conventions of discourse communities, and various approaches to communication in a pluralistic society. Prerequisite: Admission to MPW program or consent of instructor.

**WRIT 633 TEACHING COLLEGE COMPOSITION (3)** Prepares graduate students for teaching writing in the two-year college, or freshman writing at a four-year institution. Focuses on history, theories, and the practice of teaching writing. Prerequisite: Four core courses; paired with Tutoring or Internship.

**WRIT 641 THEORY OF CREATIVITY (3)** Current theory of creative process, its stages, and its relation to the central techniques of poetry and fiction. Focus on analyzing student writings as they embody creative techniques. Prerequisite: Admission to the MPW program.

**WRIT 647 WRITING POETRY (3)** Poetry writing seminar; analysis of student and published poetry, with attention to craft and readership. Overview of modern theories of poetics and poetry criticism; survey of poetry markets and publishing procedures. Prerequisite: Any WRIT 600-level course or consent of instructor.

**WRIT 651 WRITING SHORT FICTION (3)** Short-fiction workshop. Analysis of student and published fiction with attention to plot, narrative technique, characterization and readership. Survey of short-fiction markets and publishing procedures. Prerequisite: Any WRIT 600-level course or consent of instructor.

**WRIT 653 WRITING THE NOVEL (3)** Workshop on the planning, writing and publishing of the novel. Prerequisite: One WRIT 600-level course and consent of the instructor.

**WRIT 660 SEMIOTICS FOR THE PROFESSIONAL WRITER (3)** Recognizing and interpreting the symbols, signs and implied messages of cultural environments. Focus is on creating and controlling these elements in professional writing. Prerequisite: Any WRIT 600-level course or consent of instructor.

**WRIT 670-679 TOPICS IN WRITING (3)** Specialized focus on particular formats, theories or practices in professional writing. May be elected twice. Prerequisites: Two 600-level WRIT courses or consent of instructor.

**WRIT 691 RESEARCH TECHNIQUES IN PROFESSIONAL WRITING (3)** Major sources of primary and secondary information; observation, interview, survey, controlled experiment and library resources. Gathering, synthesizing and interpreting data using statistical analysis and computer programs. Techniques of poetry and fiction. Focus on analyzing student writings as they embody creative techniques. Prerequisite: Admission to the MPW program.

**WRIT 705 WRITING CREATIVE NON-FICTION (3)** Sustained practice in incorporating creativity into the content, form, voice, tone and style of students' vocational and avocational nonfiction prose. Prerequisite: WRIT 611, WRIT 615, or consent of instructor.

**WRIT 711 MANAGING A PROFESSIONAL JOURNAL (3)** Instruction and practice in managing a professional journal from manuscript processing to published article. Controlling manuscript flow; working with editors, authors, reviewers and publisher; journal production processes. Prerequisite: WRIT 671 or consent of instructor.

**WRIT 713 FREELANCE WRITING (3)** Freelance writing for magazines, newspapers, corporations, associations and technical journals. Analyzing markets, creating jobs; understanding copyrights, contracts and agents. Prerequisite: WRIT 613 or consent of instructor.

**WRIT 729 CORPORATE COMMUNICATIONS CONSULTING (3)** Designing and marketing programs, and training writers in business and government. Finding clients, developing workshops, evaluating programs. Students engage in consulting activities. Prerequisite: Recommended WRIT 625.

**WRIT 730 WRITING REVIEWS (3)** Develop proficiency in writing and marketing reviews of books and other fine/performing arts presentations. Emphasize reviewing strategies and avenues for publication. Discuss student reviews, critical stances, role of critic and aesthetics. Rhetorical analysis reviews. Prerequisite: Any 600-level WRIT course or consent of instructor.

**WRIT 731 SCIENCE AND ITS PUBLIC AUDIENCE (3)** Addresses scientific writing as analyzable discourse, increasingly issue-oriented, public and available to nonscientists. Choosing issues, writing queries and articles. No background in sciences necessary. Prerequisite: Admission to a graduate program or consent of instructor.

**WRIT 733 COMMUNICATION MANAGEMENT (3)** Introduction for professional writers to the management of information in profit/nonprofit organizations through computer systems. Concentration on techniques for identifying, gathering, storing and accessing critical data for multiple sources, and on strategies for translating data into usable information. No previous computer experience required. Prerequisite: Admission to MPW program or consent of instructor.

**WRIT 795 INDEPENDENT STUDY IN WRITING (3)** Directed independent study in selected areas of graduate level writing. Prerequisite: Permission of instructor and graduate adviser.

**WRIT 797 INTERNSHIP IN PROFESSIONAL WRITING (3)** Writing, editing, layout/design or communications consulting under the supervision of professionals in a work setting. Course may be taken only once. Prerequisite: Minimum of 15 credits completed in the program with a 3.00 average, successful completion of qualifying examination, and special permit from program director.

**WRIT 898 THESIS (6)** Original writing of publishable quality, using skills emphasized in the course work of the program. Content and design of project to reflect goals and interest of student. May be based on extensive library, laboratory or field research, or may be entirely creative. Prerequisite: Completion of all course work for M.S. in professional writing, 3.50 GPA and consent of program director.

**WRIT 899 THESIS CONTINUUM (1)**





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- KAREN ROBERTSON, Professor and Chair, Elementary Education; B.S., M.A., The Ohio State University; Ph.D., University of Iowa (1999)
- GERALD D. ROBINSON, Professor, Biology; B.A., Lock Haven State College; Ph.D., Pennsylvania State University (1977)
- PAULETTE J. ROBINSON, Assistant Professor, Instructional Technology; B.A., M.A., University of Hawaii; M.N.A., University of San Francisco; Ph.D., University of Maryland, College Park (2000)
- JUANITA ROCKWELL, Associate Professor, Theatre Arts; B.A., Colorado College; M.F.A., University of Connecticut (1994)
- PATRICIA ROMERO, Associate Professor, History; B.A., Central State University; M.A., Miami University; Ph.D., The Ohio State University (1989)
- RICHARD B. ROSECKY, Associate Professor, Marketing; B.S., Drexel University; M.B.A., Wharton Graduate Division, University of Pennsylvania; Ph.D., University of Maryland (1990)
- DONALD L. ROSENBERG, Associate Professor, Accounting; B.S., M.B.A., University of Maryland; M.S., J.D., University of Baltimore; C.P.A., Maryland; C.M.A.; C.D.P. (1984)
- DOUGLAS N. ROSS, Professor, Management; B.A. University of Saskatchewan; M.B.A., University of Denver; D.B.A., University of Colorado (1990)
- DANA ROTH LISBERGER, Assistant Professor, Music; B.M.Ed., M.M. East Texas State University; Ph.D. University of Maryland, College Park (1983)
- FRANCES ROTHSTEIN, Professor, Sociology, Anthropology and Criminal Justice; B.A., Queens College; Ph.D., University of Pittsburgh (1974)
- JOSEPH R. RUDOLPH JR., Professor, Political Science; B.A., M.A., Ph.D., University of Virginia (1986)
- RODERICK N. RYON, Professor, History; A.B., Western Maryland College; A.M., Ph.D., Pennsylvania State University (1965)
- LEV R. RYZHKOV, Assistant Professor, Chemistry; B.S., Stevens Institute of Technology; Ph.D., Brown University (1995)
- WILLIAM A. SADERA, Assistant Professor, Instructional Technology; B.S., City College, City University of New York; M.S., Ph.D., Iowa State University (2000)
- JEFFREY L. SANDERS, Professor, Psychology; B.A., Towson University; M.A., University of Texas; Ph.D., The George Washington University (1968)
- STEVEN SATTA, Assistant Professor, Theatre Arts, B.F.A., New York University Tisch School of the Arts; M.F.A., York University (2000)
- STEPHEN SCALES, Visiting Assistant Professor, Philosophy; B.A., New School for Social Research; M.A., Ph.D., University of California at San Diego (1995)
- AUBREY G. SCARBROUGH, Professor, Biology; B.S., M.S., Arkansas State University; Ph.D., University of Illinois (1970)
- DAVID SCHAEFER, Associate Professor, Physics; B.S., Towson State University; M.S., Ph.D., Purdue University (1995)
- CARL B. SCHMIDT, Professor and Chair, Music; B.A., Stanford University; M.M., Ph.D., Harvard University (1994)
- CHARLES SCHMITZ, Assistant Professor, Geography and Environmental Planning; B.S., M.A., Ph.D., University of California at Berkeley (1999)
- MYRON I. SCHOLNICK, Professor, History; B.A., American University; M.A., Ph.D., University of Maryland (1967)



- RALPH SCOTT, Professor, Geography and Environmental Planning; B.S., M.S., Florida State University; Ph.D., University of Georgia (1974)
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- W. MICHAEL SEGANISH, Associate Professor, Accounting/Business Law; B.S., M.B.A., University of Maryland; J.D., University of Baltimore School of Law (1970)
- VONNIE D. SHIELDS, Assistant Professor, Biology; B.Sc., Ph.D., University of Regina (2000)
- KIM SHIFREN, Assistant Professor, Psychology; B.A., University of Maryland, Baltimore County; M.A., Ph.D., Syracuse University (1998)
- BONG JU SHIN, Professor, Economics; B.A., University of Pusan; M.A., Ph.D., The Ohio State University (1966)
- LAWRENCE H. SHIRLEY, Associate Professor, Mathematics; B.S., California Institute of Technology; M.Ed., University of Illinois; Ph.D., Ahmadu Bello University, Nigeria (1989)
- ROBERT E. SHOEMAKER, Professor, Biology; B.A., Carleton College; M.S., Ph.D., University of Minnesota (1967)
- MARTHA SIEGEL, Professor, Mathematics; B.A., Russell Sage College; M.A., Ph.D., University of Rochester (1971)
- DANIEL D. SINGER, Professor, Finance; B.S., Rider College; M.S., State University of New York; Ph.D., University of Colorado (1990)
- JAN SINNOTT, Professor, Psychology; B.S., St. Louis University; M.A., Ph.D., The Catholic University (1978)
- BARBARA R. SLATER, Professor, Psychology; B.A., M.Ed., St. Lawrence University; Ph.D., Teachers College, Columbia University (1971)
- ROBERT L. SLEVIN, Associate Professor, Kinesiology; B.S., Ball State University; M.S., Baylor University; Ed.D., Louisiana State University (1970)
- JAMES SMITH, Associate Professor, Computer and Information Sciences; A.B., University of Rochester; M.A., State University of New York; M.S., Johns Hopkins University (1967)
- LOUISE W. SMITH, Professor, Marketing; B.A., University of Delaware; M.E., M.B.A., Harvard University; Ph.D., University of Maryland (1984)
- ROBERT F. SMITH, Professor, Elementary Education; B.S., M.A., Ph.D., Fordham University (1990)
- WILLIAM P. SMITH, Associate Professor, Management; B.S., University of Nebraska; M.S., Colorado State University; Ph.D., Arizona State University (1988)
- DIANE SMITH-SADAK, Assistant Professor, Theatre Arts (1999); B.A., Union College; M.F.A., Florida State University
- HOUSHANG H. SOHRAB, Professor, Mathematics; B.S., M.A., University of Paris, France; Ph.D., University of California (1984)
- JANET STERN SOLOMON, Professor and Vice Chair, Management; A.B., Syracuse University; M.B.A., University of Missouri at Kansas City; Ph.D., The George Washington University (1983)
- TRUDY L. SOMMERS, Associate Professor, Management; B.A., Hanover College, Indiana; M.S., Indiana University; Ph.D., University of Michigan (1988)
- ERIK P. SILLDORFF, Assistant Professor, Biology; B.A., Ph.D., University of Delaware (1998)
- JOEL W. SNODGRASS, Assistant Professor, Biology; B.S., Guilford College; M.S., University of Central Florida; Ph.D., University of Georgia (1999)
- RAJESHWAR P. SRIVASTAVA, Professor, Computer and Information Sciences; M.S.C., Allahabad University, India; M. Math., University of Waterloo; Ph.D., University of Idaho (1986)
- JAY STANLEY, Professor, Sociology, Anthropology and Criminal Justice; B.S., M.A., University of Tennessee; Ph.D., University of Maryland (1971)
- SANDRA CARSON STANLEY, Professor, Sociology, Anthropology and Criminal Justice; B.A., Towson University; M.A., Loyola College; Ph.D., University of Maryland (1982)

- PATRICK STEARNS, Assistant Professor, Electronic Media and Film; B.F.A., Ohio University; M.F.A., Howard University; Ph.D., Bowling Green State University (1999)
- LAMONT STEEDLE, Professor and Chair, Accounting; B.S., M.S., Ph.D., Pennsylvania State University (1990)
- STUART STEIN, Assistant Professor, Art; B.S., Towson State University; M.F.A., Maryland Institute College of Art (1996)
- LEONID STERN, Professor, Mathematics; M.S., D.Sc., Technion-Israel Institute of Technology (1986)
- REGENA G. STEVENS-RATCHFORD, Professor, Occupational Therapy; B.S., M.S., The Ohio State University; Ph.D., University of Maryland (1980)
- BARBARA R. STEWART, Associate Professor, Accounting; A.B., Barnard College; M.A., Ph.D., Columbia University; C.P.A., Maryland (1988)
- RAYMOND A. STINAR, Professor and Chair, Kinesiology; B.S., M.S., Northern Illinois University; Ph.D., University of Maryland (1972)
- ALEX D. STORRS, Assistant Professor, Physics, Astronomy and Geosciences; B.S., Massachusetts Institute of Technology; M.S., Ph.D., University of Hawaii (2000)
- NORA STURGES, Assistant Professor, Art; B.A. Bowdoin College; M.F.A., Ohio University (1999)
- BRIDGETT Z. SULLIVAN, Assistant Professor, Art; B.F.A., Maryland Institute College of Art; M.F.A., Towson State University (1987)
- TIMOTHY E. SULLIVAN, Associate Professor, Economics; B.A., M.A., Eastern Illinois University; M.S., Ph.D., University of Illinois (1989)
- WEI SUN, Assistant Professor, Mathematics; B.A., Northeast Normal University, China; M.A., M.Ed., Ed.D., Columbia University (1996)
- THOMAS G. SUPENSKY, Professor, Art; B.F.A., The Ohio State University; M.Ed., Towson University (1968)
- LINDA M. SWEETING, Professor, Chemistry; B.S., M.A., University of Toronto; Ph.D., University of California, Los Angeles (1970)
- ZOLTAN SZABO, Professor, Music; B.M., M.M., Peabody Conservatory; D.M., Indiana University (1979)
- FILIZ TABAK, Assistant Professor, Management; B.S., Istanbul Technical University; M.B.A., Bogazici University, Istanbul; M.S., University of Istanbul; Ph.D., Oklahoma State University (1995)
- SANDRA TATMAN, Assistant Professor, Art; B.A., University of Delaware; M.L.S., University of Oregon; Ph.D., University of Delaware [1994]
- DIANNE E. TAYLOR, Associate Professor, Nursing; R.N. Diploma, Union Memorial Hospital School of Nursing; B.S., Southern Connecticut State College; M.S., Yale University; Ed.D., University of Maryland (1979)
- PRECHA THAVIKULWAT, Professor, Management; B.S., Ph.D., University of Minnesota (1988)
- VIRGINIA THOMPSON, Assistant Professor, Geography and Environmental Planning; B.A., M.A., University of Missouri; Ph.D., University of Oklahoma (1995)
- JOHN F. TINKLER, Assistant Professor, English; Ph.D., Queen's University, Canada (1994)
- JOSEPH J. TOPPING, Professor, Chemistry; B.S., LeMoyne College; M.S., Ph.D., University of New Hampshire (1970)
- JOHN R. TURNER, Associate Professor, Mass Communication and Communication Studies; B.S., M.S., West Virginia University; Ph.D., Ohio University (1989)
- LEON UKENS, Professor, Physics; B.S., Fort Hayes Kansas State College; M.S., University of Northern Colorado; Ph.D., New York University (1972)
- JOHN G. VAN OSDELL, Professor and Chair, History; B.A., Ph.D., Tulane University (1967)
- RICHARD E. VATZ, Professor, Mass Communication and Communication Studies; B.A., M.A., Ph.D., University of Pittsburgh (1974)
- DAVID E. VOCKE, Professor, Secondary Education; B.S., M.S., Miami University; Ph.D., University of Iowa (1989)
- DONNA WAGNER, Professor and Director of Gerontology; B.S., M.S., Ph.D., Portland State University (1997)

- ROBERT WALL, Professor, Reading, Special Education and Instructional Technology; B.S., Iowa State University; M.A., Kent State University; Ph.D., University of Maryland (1966)
- ESTHER WANGARI, Assistant Professor, Women's Studies; B.A., Warren Wilson College; M.A., Ph.D., The New School for Social Research (1996)
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- DONALD E. WATTS, Assistant Professor, Music; B.M., M.M., University of Kansas; Ph.D., University of Maryland (1973)
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- IRVIN WEINTRAUB, Associate Professor, Economics; A.B., Johns Hopkins University; M.S., Columbia University; M.A., University of Maryland (1966)
- DEITRA WENGERT, Professor, Health Science; B.S., Bowie State College; M.Ed., Towson University; Ph.D., University of Maryland (1979)
- JOHN M. WESSNER, Associate Professor and Chair, Physics; A.B., Amherst College; M.S.T., Wisconsin State University at Superior; Ph.D., Montana State University (1973)
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- EVANGELINE A. WHEELER, Associate Professor, Psychology; B.S., Howard University; Ph.D., University of California at Berkeley (1994)
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- ELIZABETH WILKINS-CANTER, Assistant Professor, Secondary Education; B.M.E., Illinois Wesleyan University; M.S., University of Illinois; Ph. D., Southern Illinois University (1999)
- JACQUELINE WILKOTZ, Professor, English; A.B., M.A., Ph.D., University of California at Berkeley (1973)
- LAURIE C. WILLIAMS-HOGARTH, Assistant Professor, Biology; B.S., Georgetown University, Ph.D., Howard University (1999)
- G. PATRICIA WILSON, Assistant Professor, Early Childhood Education; B.S., St. Joseph's College; M.S., Ph.D., University of New Hampshire (1999)
- NANCY W. WILTZ, Assistant Professor, Early Childhood Education; B.S., University of Missouri; M.A., Ph. D., University of Maryland, College Park (1999)
- LAWRENCE E. WIMMERS, Associate Professor, Biology; B.S., University of Dayton; Ph.D., Cornell University (1995)
- DONALD R. WINDLER, Professor, Biology; B.S., M.A., Southern Illinois University; Ph.D., University of North Carolina (1969)
- ALAN S. WINGROVE, Professor, Chemistry; B.S., University of California at Berkeley; Ph.D., University of California at Los Angeles (1973)
- DAVID R. WIZER, Associate Professor, Reading, Special Education and Instructional Technology; B.A., Rider College; M.A., Ph.D., University of Maryland (1997)
- JANE L. WOLFSON, Associate Professor, Biology, B.A., Cornell University; Ph.D., State University of New York at Stony Brook (1998)
- CHERYL E. WOOD, Lecturer, Department of Reading, Special Education and Instructional Technology. B.A., Virginia Polytechnic Institute and State University; M.Ed., Towson University (1999)
- GARY WOOD, Associate Professor, English; B.A. Westminster College; M.A., Ph.D., University of Pittsburgh (1971)

JENNIFER WOOD, Assistant Professor, Mass Communication and Communication Studies; B.A., Rockhurst College; M.A., Webster University; Ph.D., Bowling Green State University (1999)

TAMARA WOROBY, Professor, Economics; B.A., University of Regina; M.A., Ph.D., Queens University, Ontario, Canada (1978)

MAUREEN YARNEVICH, Associate Professor, Mathematics; B.S., University of Hartford; M.S., Ph.D., American University (1994)

JUNE YUM, Associate Professor, Mass Communication and Communication Studies; B.A., Seoul National University; M.A., University of Hawaii; Ph.D., University of Southern California (1989)

DAVID ZANG, Associate Professor, Kinesiology; B.A., Wittenburg; M.S., Pennsylvania State University; Ph.D., University of Maryland (1995)

H. HARRY ZHOU, Professor, Computer and Information Sciences; M.S., Ph.D., Vanderbilt University (1989)

MARIOUS ZIMAND, Assistant Professor, Computer and Information Sciences; Ph.D., University of Bucharest; Ph.D., University of Rochester.

JAY J. ZIMMERMAN, Associate Professor, Mathematics; B.A., Knox College; M.S., Ph.D., University of Illinois (1989)

SALVATORE M. ZUMBO, Associate Professor, Modern Languages; B.A., M.A., University of Akron; Ph.D., University of Arizona (1989)

STANLEY ZWEBACK, Assistant Professor, Psychology; B.A., Trenton State College; M.Ed., Rutgers University; Ph.D., University of Maryland (1970)







# Appendix A

## CAMPUS FACILITIES

### ACADEMIC BUILDINGS

**STEPHENS HALL** - This distinctive Jacobean building, constructed in 1915, has long been a landmark in the Baltimore area. Departmental and faculty offices as well as classrooms and laboratories of the College of Business and Economics, the Department of Mathematics and the Department of Computer and Information Sciences are housed in this building. A 733-seat theater capable of supporting light opera and musicals is also located in Stephens Hall.

**VAN BOKKELEN HALL** - A classroom building for the departments of Communication Sciences and Disorders and Mass Communication and Communication Studies, this facility contains therapy rooms for speech pathology and audiology majors, as well as a production studio for rehearsing radio and television broadcasts.

**LINTHICUM HALL** - Completed in 1967 and one of the largest classroom buildings on campus, it houses the departments of English, Modern Languages, History, Philosophy and Religious Studies, Geography and Environmental Planning, Sociology, Anthropology and Criminal Justice, Political Science and Economics, and associated offices.

**SMITH HALL** - First occupied in 1965, the building was expanded in 1976 to 223,285 square feet to house the departments of Biological Sciences, Chemistry, and Physics, Astronomy and Geosciences. Included are plant growth chambers, greenhouses, reach-in environmental chambers, an aquarium room with an aquatron, and controlled environmental animal rooms, in addition to various classrooms and class laboratories. The Watson-King Planetarium is on the top floor.

**BURDICK HALL** - Completed in 1968, it houses the departments of Nursing, Occupational Therapy and Occupational Science,

Health Sciences and Dance, and it contains facilities for intramural sports, an Olympic-sized swimming pool, classrooms, dance studios, three gymnasiums, and various training and dressing rooms.

**TOWSON SPORTS COMPLEX** - The 24-acre sports complex includes the Towson Center, the 5,000-seat Minnegan Stadium, 10 tennis courts with lighting, and separate fields for football, lacrosse, soccer, field hockey and softball. The Towson Center arena seats 5,000 people for athletic events, concerts and lectures. The Kinesiology and Athletics departments are located in the Towson Center. The building also has classrooms, a research laboratory, a curriculum center, student and faculty lounges, indoor archery and golf ranges, weight rooms, training areas and facilities, fencing, wrestling and gymnastic rooms, open teaching areas, locker rooms, team rooms, a fitness center, handball courts and squash courts.

**LIDA LEE TALL** - This building houses the offices, classrooms and laboratories of the Department of Occupational Therapy and Occupational Science, and the Student Day Care Center.

**ALBERT S. COOK LIBRARY** - Built in 1969, the five-story library contains 700,000 volumes and non-book items, and over 2,100 periodical subscriptions. Towson's long history is reflected in the extensive collections of bound volumes, reference works, and substantial holdings on microfilm. The Computing and Network Services Center (CANS) is located on the ground floor.

**MEDIA CENTER** - This building houses the offices of equipment circulation, information retrieval, television productions, cinematography by production, graphics, film loan services, still photography and audio productions and electronic repairs, constituting one of the best equipped audiovisual centers in the state. The campus radio station, WCVT-FM, is located in this building.

**CENTER FOR THE ARTS** - A \$6.5-million building opened in 1973, it houses the departments of Art, Music and Theatre Arts, as well as a main stage theatre, a studio theatre, concert hall, the Holtzman Art Gallery and the Asian Arts & Culture Center, which displays the university's extensive Asian Art Collection.

**HAWKINS HALL** - Part of a three-building complex, it houses the Elementary, Secondary and Early Childhood Education departments. Named for the former president, Earle T. Hawkins, it is equipped with large, attractive classrooms which can be sectioned into several smaller rooms.

**PSYCHOLOGY BUILDING** - Part of the three-building complex that contains Hawkins Hall, it houses the Department of Psychology, including learning laboratories, animal laboratories, statistics laboratories and an auditorium with learning cubicles.

**LECTURE HALL** - Part of the three-building complex that contains Hawkins Hall and the Psychology Building, it is equipped with broad space, a large electronic screen, and adjacent seminar rooms.

## OTHER BUILDINGS

**UNIVERSITY UNION** - The three-story University Union is the social hub of the campus. Educational, cultural and social programs at the Union are designed to appeal to the entire campus community. The Union's services and facilities include: a full-service post office, the University Store, the Ticket Office, Cash Office, Auxiliary Services Business Office, VIPs recreation center, Art Services, Auxiliary Services administrative offices, three ATMs for banking, dining facilities, SGA offices, Information Desk, Event and Conferences Services, Student Activities, Campus Ministries, Women's Center, an art gallery, the African American Cultural Center, Orientation and New Student Programs, SAGE, The Towerlight student newspaper office, and Tiger Reels video rental.

**ADMINISTRATION BUILDING** - Located at 7720 York Road, this building houses

most of the executive and administrative offices of the university.

**DOWELL HEALTH CENTER** - The Dowell Health Center is an outpatient primary health care clinic with an experienced staff of physicians, nurse practitioners, physician's assistants, nurses and health educators. All registered students, including part-time and graduate students, are eligible to use health center services.

**THE BURKSHIRE AT TOWSON UNIVERSITY** - Adjacent to campus is a 18-story apartment community for upper-level undergraduate and graduate students. Other facilities in the Burkshire make it suitable for professional meetings, computer training classes, conferences, luncheons and dinners, as well as social gatherings. An elevated footbridge crosses Burke Avenue to connect the main campus with the Burkshire property.

**GLEN ESK** - Formerly the home of the president, it is now occupied by the Counseling Center, which provides a variety of counseling and psychological services to students, faculty and staff.

**GENERAL SERVICES BUILDING** - These facilities are used by physical plant and other service operations. The building houses maintenance trade shops, the motor pool, the University Police department, and central stores and receiving.

## Appendix B

### THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA, a.k.a. Buckley Amendment)

The Family Educational Rights and Privacy Act of 1974, as revised, is a federal law requiring the institution to maintain the confidentiality of student educational records. This law states that a) a written institutional policy must be established and b) a statement of adopted procedures covering the privacy of students be made available. The university has taken the appropriate steps to comply with this law.



Towson University accords all the rights under the law to students who have reached the age of majority. Information may be released to parents who have established students' dependency as defined by the Internal Revenue Code of 1954, Section 152. The Judicial Affairs office will review the parent's claim of dependency and notify students of the claim prior to release of any academic information. Except as permitted under the Act, no one outside the institution will have access to any information from students' education records without their written consent. Those permitted access under the Act include personnel within the institution, officials of other institutions in which students seek to enroll, persons or organizations providing financial aid, accrediting agencies, persons in compliance with a judicial order, and persons acting in an emergency situation to protect the health or safety of others.

Within the Towson University community, only those individuals acting in students' educational interest are allowed access to student education records. These include personnel in the offices of Admissions, Academic Advising, Enrollment Services, Bursar, Financial Aid, and other academic personnel within the limitations of their need to know. The director of Enrollment Services may grant access to education records for other legitimate reasons permitted under the Act.

The university may provide Directory Information in accordance with the provisions of the Act without the written consent of students. Directory Information includes student name, address, telephone number(s), date and place of birth, major field of study, dates of attendance, degrees and awards received, the most recent previous educational institution attended by students, participation in officially recognized activities and sports, and the weight and height of members of athletic teams. Enrollment Services will release Directory Information at its discretion and may release it over the telephone or in writing. Students may withhold Directory Information by notifying Enrollment Services in writing within two weeks after the first day of classes.

Requests for non-disclosure will be honored for only one academic year; thereafter, authorization to withhold Directory Information must be filed annually with the director of Enrollment Services.

The Act also provides students with the right to inspect and review information contained in their education records. The director of Enrollment Services at Towson University has been designated to coordinate the inspection and review of student education records. Students wishing to review their education records must make written requests to the Records Office. Records covered by the Act will be made available within 30 days of the request. Students may have copies made of their records at their expense with certain exceptions (e.g., copies of the original or source document that exists elsewhere or when students have an outstanding financial obligation to the university). Education records do not necessarily include records of instructional, administrative, or educational personnel, which are the sole possession of the makers. Health records, employment records, or alumni records will not be released to students but may be reviewed by them or by physicians of their choosing.

FERPA does not allow students to inspect and review the following: financial information submitted by their parents, confidential letters and recommendations associated with admissions, employment or job placement, or honors to which they have waived their rights of inspection and review. Education records containing information about more than one student are restricted, and the institution will permit access only to that part of the records that pertains to the individual student. The institution will not permit students to inspect and review confidential letters and recommendations placed in their files prior to January 1, 1975.

The university has established an appeal mechanism in accordance with the Act. Students who believe their education records contain inaccurate, misleading, or unlawful information may discuss their problems informally with the director of Enrollment Services. If the director agrees with the request,



the appropriate records will be amended. If students' requests are denied, they will be notified by the director of the right to a formal hearing.

Requests for formal hearings must be made in writing to the vice president for Student Affairs, who will inform students of the date, place and time of the hearing. Students may present evidence and may be assisted or represented at the hearings by counsel. The hearing panel that will adjudicate such challenges may include the vice president for Academic Affairs, the vice president for Student Affairs, the dean of the Graduate School, and the academic dean of students' colleges, or their designees. Decisions of the hearing panel will be final. The findings will be based solely on the evidence presented at the hearing and will consist of written statements summarizing the evidence and stating the reasons for the decisions, and will be delivered to all parties concerned. The education records will be corrected or amended in accordance with the decisions of the hearing panel. Students dissatisfied with the outcome of their hearings may prepare a written statement to be placed in the education records and maintained as part of students' records.

Students who believe the adjudications of the challenges were unfair or not in keeping with the provisions of FERPA may request that the hearing be reviewed by the president of the university. In addition, students who believe their rights have been abridged may file complaints with The Family Educational Rights and Privacy Act office (FERPA), Department of Health, Education, and Welfare, Washington, D.C. 20201, concerning the alleged failures of Towson University to comply with the Act.

Revisions and clarifications of this policy will be published as the law warrants.

## Appendix C

### RESIDENCY POLICY

#### Viii - 2.70 Policy on Student Classification for Admission, Tuition and Charge-Differential Purposes.

(Approved by the Board of Regents August 28, 1990; Amended July 10, 1998; Amended November 27, 2000)

### I. POLICY

It is the policy of the Board of Regents of the University System of Maryland (USM) to recognize the categories of in-state and out-of-state students for the purpose of admission, tuition, and charge differentials at those institutions where such differentiation has been established.

A. An in-state student is a student whom the university determines to be a permanent resident of the state of Maryland. For the purposes of this policy, "permanent resident" is defined as a person who satisfies all the following conditions and has done so for at least twelve (12) consecutive months immediately prior to and including the last date available to register for courses in the semester/term for which the person seeks in-state status:

1. Is not residing in the state of Maryland primarily to attend an educational institution; and
2. Owns and continuously occupies or rents and continuously occupies living quarters in Maryland. There must exist a genuine deed or lease in the individual's name reflecting payments/rents and terms typical of those in the community at the time executed. Persons not having such a lease may submit an affidavit reflecting payments/rents and terms as well as the name and address of

the person to whom payments are made which may be considered as meeting this condition. As an alternative to ownership or rental of living quarters in Maryland, a student may share living quarters in Maryland which are owned or rented and occupied by a parent, legal guardian or spouse; and

3. Maintains within Maryland substantially all personal property; and
  4. Pays Maryland income tax on all earned taxable income including all taxable income earned outside the state; and
  5. Registers all owned motor vehicles in Maryland in accordance with Maryland law; and
  6. Possesses a valid Maryland driver's license, if licensed, in accordance with Maryland law; and
  7. Is registered in Maryland, if registered to vote; and
  8. Receives no public assistance from a state other than the State of Maryland or from a city, county or municipal agency other than one in Maryland; and
  9. Has a legal ability under federal and Maryland law to live permanently without interruption in Maryland.
- B. In addition, persons with the following status shall be accorded the benefits of in-state status for the period in which they hold such status:
1. A full-time or part-time (at least 50 percent time) regular employee of the University System of Maryland.
  2. The spouse or financially dependent child of a full-time or part-time (at least 50 percent time) regular employee of the USM.
  3. A full-time active member of the armed forces of the United States whose home of residency is Maryland or one who resides or is stationed in Maryland, or the spouse or a financially dependent child of such a person.
  4. For UMUC, a full-time active member of the armed forces of the United States on active duty, or the spouse of a member of the armed forces of the United States on active duty.
  5. A graduate assistant appointed through the University System of Maryland for the semester/term of the appointment. Except through prior arrangement, this benefit is available only for enrollment at the institution awarding the assistantship.
- C. Students not entitled to in-state status under the preceding paragraphs shall be assigned out-of-state status for admission, tuition, and charge-differential purposes.
- D. Assignment of in-state or out-of-state classification will be made by the university upon an assessment of the totality of facts known or presented to it. The person seeking in-state status shall have the burden of proving that he or she satisfies all requirements.
- E. The following circumstances raise a presumption that the student is residing in the state of Maryland primarily for the purpose of attending an educational institution:
1. The student was attending high school or residing outside Maryland at the time of application for admission to a USM institution.
  2. The student is both (a) not financially independent and (b) is financially dependent upon a person not a resident of Maryland.
- The burden shall be on the student to rebut the presumption.

### III. PROCEDURES

- A. An initial determination of in-state status will be made by the university at the time a student's application for admission is under consideration. The determination made at that time, and any determination made thereafter, shall prevail for each semester/term until the determination is successfully challenged in a timely manner.
- B. A change in status must be requested by submitting a USM Petition for Change in Classification for Admission, Tuition and Charge Differential.  
A student applying for a change to in-

state status must furnish all required documentation with the petition by the last published date to register for the forthcoming semester/term for which the change in classification is sought.

- C. The student shall notify the institution in writing within fifteen (15) days of any change in circumstances which may alter in-state status.
- D. In the event incomplete, false, or misleading information is presented, the institution may, at its discretion, revoke in-state status and take disciplinary action provided for by the institutions policy. Such action may include suspension or expulsion. If in-state status is gained due to false or misleading information, the university reserves the right to retroactively assess all out-of-state charges for each semester/term affected.
- E. Each institution of the University of Maryland shall develop and publish additional procedures to implement this policy. Procedures shall provide that on request the president or designee has the authority to waive any residency criterion set forth in Section I, if it is determined that the student is indeed a permanent resident and the application of the criteria creates an unjust result. These procedures shall be filed with the Office of the Chancellor.

### III. DEFINITIONS

- A. Financially Dependent: For the purposes of this policy, a financially dependent student is one who is claimed as a dependent for tax purposes or who receives more than one-half of his or her support from another person during the twelve (12) month period immediately prior to the last published date for registration for the semester or session. If a student receives more than one-half of his or her support in the aggregate from more than one person, the student shall be considered financially dependent on the person providing the greater amount of support.

- B. Financially Independent: A financially independent student is one who (1) declares himself or herself to be financially independent as defined herein; (2) does not appear as a dependent on the federal or state income tax return of any other person; (3) receives less than one-half of his or her support from any other person or persons; and (4) demonstrates that he or she provides through self-generated support one-half or more of his or her total expenses.
- C. Parent: A parent may be a natural parent, or, if established by a court order recognized under the law of the state of Maryland, an adoptive parent.
- D. Guardian: A guardian is a person so appointed by a court order recognized under the law of the state of Maryland.
- E. Spouse: A spouse is a partner in a legally contracted marriage.
- F. Child: A child is a natural child or a child legally adopted pursuant to a court order recognized under the law of Maryland.
- G. Self-Generated: Self-generated describes income which is derived solely from compensation for an individual's own efforts as evidenced, for example, by federal or state W-2 forms or IRS Form 1099 where interest income is based upon finances created from one's own efforts. For the purpose of this policy, grants, stipends, awards, benefits, loans and gifts (including federal and state aid, grants and loans) may not be used as self-generated income.
- H. Regular Employee: A regular employee is a person employed by USM who is assigned to a state budget line or who is otherwise eligible to enroll in a state retirement system. Examples of categories NOT considered regular employees are graduate students, contingent employees and independent contractors.

### IV. IMPLEMENTATION PERIOD

This policy, as amended by the Board of Regents on November 27, 2000, shall be applied to all student residency classification decisions made on or after that date.

## Appendix D

### THE MISSION OF GRADUATE PROGRAMS FOR TEACHERS AND EDUCATION SPECIALISTS AT TOWSON UNIVERSITY

*The University that Prepares Teachers as Facilitators of Active Learning*

Graduate programs in the field of education at Towson University provide advanced study for teachers and education specialists. Study includes emphasis on understanding knowledge, skill development and attitudes essential to experienced professionals in education settings.

The university's graduate programs for teachers and education specialists emphasize methods of instruction and scholarship which promote active student learning. To this end, the faculty are committed to the following goals:

**SCHOLARLY GROWTH:** Demonstrate a commitment to scholarly growth in teaching, research and service.

**ADVANCED STUDY:** Provide instruction which emphasizes advanced study of knowledge and skills in their specialization.

**INTERPERSONAL RELATIONS:** Promote good interpersonal relationships among persons in the teacher education community.

**PROFESSIONALISM:** Promote positive attitudes and professional commitment.

**ACTIVE PARTICIPATION:** Promote active involvement of persons in campus, community and professional affiliations.

**RESEARCH:** Develop in students the ability to conduct, interpret, evaluate and communicate research in their specialty.

**PROFESSIONAL SKILLS:** Develop in students successful methods used by practicing professionals in their specialty.

**INSTRUCTIONAL TECHNOLOGY:** Develop in students the values and skills that ensure utilization of current and emerging technologies.

**MULTICULTURALISM:** Develop understandings in students which enable them to work with students and other professionals of diverse ethnic and cultural backgrounds.

**HUMAN DEVELOPMENT:** Promote an understanding of human development that permits interpretation of learning behavior from childhood through adulthood.

**INTEGRATING THEORY AND PRACTICE:** Provide internships (in certification programs) that provide opportunities to integrate theory and practice.

**MERIT SYSTEM:** Maintain an evaluation and reward system that encourages superior performance by faculty and students.

**INDIVIDUAL DIFFERENCES:** Provide equal opportunity for students to pursue their interests and talents without regard for race, cultural background, sex or handicaps.

**UNIVERSITY/SCHOOL RELATIONS:** Work cooperatively with school systems and other agencies to develop advanced programs that meet current educational needs.

**MINORITY PARTICIPATION:** Actively recruit members of underrepresented minority groups for careers in education.

#### Statement of Professional Conduct

The faculty recognizes a special responsibility and authority to ensure that students in graduate degree programs in education demonstrate attitudes and behaviors consistent with standards of the program and the profession. Therefore, the faculty reserves the authority to exclude a student whose academic standing or general conduct is considered unsatisfactory. The student has the right to due process.

*Approved 10/90*



# Appendix E

## CODE OF CONDUCT

### I. Student Rights and Responsibilities

#### A. Preamble

Academic institutions exist for the transmission of knowledge, the pursuit of truth, the development of students, and the general well being of society. Free inquiry and free expression are indispensable to the attainment of these goals. As members of the academic community, students should be encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth. Freedom to teach and freedom to learn are inseparable facets of academic freedom. The freedom to learn depends upon appropriate opportunities and conditions in the classroom, on the campus, and in the larger community. Students should exercise their freedom with responsibility. The responsibility to secure and respect general conditions conducive to the freedom to learn is shared by all members of the community. The present code is designed to establish policies and procedures which provide and safeguard this freedom.

#### B. Purpose

Towson University's mission to the community at large is one of academic excellence and achievement. To that end, its campus community must be one wherein respect for the individual pursuit of academic excellence and achievement is given priority. In order to foster this environment, it is incumbent upon students to conduct themselves within the framework of the reasonable rules and regulations designed to enhance and protect the academic environment of the university. By specifying behavioral standards and by establishing fair and efficient processes for adjudicating conflict, the university seeks to protect the environment in which learning is nurtured and respect for that goal is continually afforded.

### C. Individual Rights and Responsibilities

#### 1. Access to higher education

a. Within the limits of its facilities, the institution and its courses, programs and activities shall be open to all applicants who

are qualified, according to its admission requirements.

1) The institution shall, in the catalogs, make clear to the students the standards of its programs.

2) Admission to Towson University shall be in compliance with federal and state laws and regulations that prohibit illegal discrimination.

#### 2. Classroom Expression

a. Discussion and expression of all views relevant to the subject matter are permitted in the classroom, subject only to the responsibility of the instructor to maintain order and reasonable academic progress.

1) Faculty comportment shall be in accordance with standards set forth by the American Association of University Professors.

2) Students shall not be penalized for expressing controversial views relevant to the subject matter in class.

b. Evaluation of a student's academic performance shall be neither prejudiced nor capricious.

#### 3. Personal Expression

a. Discussion and expression of all views is permitted within the institution subject only to requirements for the maintenance of order. Support of any cause, by orderly means which do not disrupt the operation of the institution, is permitted.

b. Students, groups and campus organizations may invite to hear any persons of their own choosing, subject only to the requirements of the use of institutional facilities and regulations of the university, and the Board of Regents of the University System of Maryland.

c. Students' dress and grooming, of any style, are permitted subject to legal prohibitions.

d. Students, groups or organizations may distribute written material on campus, providing such distribution does not disrupt the operations of the institution or deface property and adheres to the Advertising Policy and/or the Distribution and Solicitation Policy which is available at the University Union, Information Desk (410-704-4636).

e. The right of assembly is granted within the institutional community. The institution retains the right to assure the safety of individuals, the protection of property, and the continuity of the educational process.

f. Orderly picketing and other forms of peaceful protest are permitted on institutional premises. Interference with entrances to institutional facilities, intentional interruption of classes, or damage to property exceeds permissible limits.

g. Orderly picketing and orderly demonstrations are permitted in public areas within institutional buildings subject to the requirements of non-interference.

h. Every student has the option to be interviewed on campus by an organization authorized to recruit at the institution.

#### 4. Privacy

a. Students have the same rights of privacy as any other citizens and surrender none of those rights by becoming members of the academic community.

b. Information about student views, beliefs and political associations acquired by faculty and staff in the course of their work as instructors, advisers and counselors is confidential and is not to be disclosed to others unless under legal compulsion or with permission of the student.

c. The privacy and confidentiality of all student records shall be preserved. Official student academic records, supporting documents, and other student files shall be maintained only by full-time members of the institution's staff employed for that purpose and students employed by them who may have access in line of employment. Separate files shall be maintained for the following: academic records, supporting documents and general educational records, records of disciplinary proceedings, medical and psychiatric records, and financial aid records.

d. No entry may be made on a student's academic record and no document may be placed in the student's file without actual notice to the student.

e. Every student is guaranteed the right to inspect and review all informa-

tion in his or her own files maintained by the Office of Judicial Affairs, subject only to reasonable regulations as to time, place and supervision. However, the student may not have copies of items in a file.

1) A student may challenge the accuracy or presence of any item by following the standard appeal process (see Appeal Procedures below).

2) When a case is referred, a disciplinary file may be developed in the name of the charged student.

3) The file will be voided if the charges against the student are not substantiated.

4) The file will be retained for seven years if the charges are substantiated. Disciplinary records may be retained for longer periods of time or permanently if the sanction is suspension or expulsion from the university or university housing.

5) Any record, file or incident report to which the student has access and an opportunity to respond, or records of previous hearings, may be taken into consideration by the decision-maker in arriving at an appropriate decision.

6) Pursuant to recent changes in the Family Educational Rights and Privacy Act of 1974, as revised, the Judicial Affairs Office reserves the right to notify parents of students under the age of 21 who are found responsible for alcohol or drug violations of the Code of Student Conduct.

f. No record may be made in relation to any of the following matters except upon the express written request of the student: religion, political or social views, and membership in any organization other than honorary and professional organizations directly related to the educational process.

g. Agencies of the university which keep student records must make students aware of how and to whom those records may be divulged. No information in any student file may be released to anyone except with prior written consent of the student concerned or as stated below.

1) Administrators may have access to student records for internal educational and administrative purposes.

2) Members of the faculty may have access to academic records for internal educational and administrative purposes.

3) Non-academic records shall be routinely available only to administrators and staff charged with their maintenance. Faculty and staff may have access to all records for statistical purposes.

4) Directory information, as defined in this Appendix, may be released to any inquirer unless the student has specifically asked the director of Enrollment Services to withhold that information.

5) Unless under legal compulsion, all other information regarding students' records shall be denied to any person making an inquiry.

h. Upon graduation or withdrawal from the institution, the records and files of former students shall continue to be subject to the provisions of this code.

#### **D. Rights and Responsibilities of Campus Organizations**

1. Organizations, groups, and NCAA teams may be established within the institution for any legal purpose. Their recognition will be in accordance with established guidelines.

2. Membership in all institution-related organizations, within the limits of their facilities, shall be open to any fee-paying member of the institution community who is willing to subscribe to the stated aims and meet the stated obligations of the organization.

3. Individual members, as well as the organization, group, or team itself, can be charged with violations of the Code of Student Conduct, including those actions defined in the "Hazing, Pre-Initiation Policy" section of this document.

4. Use of university facilities shall be granted to recognized student organizations. Student organizations shall be given priority for use of space as outlined in procedures established by Event and Conference Services and the Student Government Association.

5. The authority to allocate institutional funds derived from student fees for use by organizations shall be delegated to a body

in which student participation in the decision-making process is assured.

a. Approval of requests for funds is conditional upon submission of budgets to and approval by this body.

b. Financial accountability, in full accordance with university and state policies, regulations, procedures and practices, is required for all allocated funds, including statement of income and expenses on a regular basis.

c. Otherwise, organizations shall have independent control over the expenditure of allocated funds.

6. The student press is to be free of censorship. The editors and managers shall not be arbitrarily suspended because of student, faculty, administration, alumni or community disapproval of editorial policy or content. Similar freedom is assured oral statements of views on institution-controlled and student-operated radio or television stations. This editorial freedom entails a corollary obligation under the canons of responsible journalism and applicable regulations of the Federal Communications Commission.

7. All student communications shall explicitly state that the opinions expressed are not necessarily those of the institution or its student body.

#### **E. Rights of Students in Institutional Government**

1. All constituents of the institutional community are free, individually and collectively, to express their views on issues of institutional policy and on matters of interest to the student body. Clearly defined means shall be provided for student expression on all institutional policies affecting academic and student affairs.

2. The role of student government and its responsibilities shall be made explicit. There should be no review of student government actions except where review procedures are agreed upon in advance, or where actions of the government are either potentially illegal or present a clear danger to either individual or institutional rights.

3. On questions of educational policy, students are entitled to a participatory func-

tion. Students shall be designated as members of standing and special committees concerned with institutional policy affecting academic and student affairs, including those concerned with curriculum, discipline, admission, academic standards, university governance and allocation of student funds.

#### F. Student Grievance Procedures

1. Any student or group may file a grievance against an administrative official or faculty member for violation of student rights as listed above.

2. The Judicial Affairs Office may make a preliminary investigation to determine whether the charges can be disposed of informally by mutual consent without the initiation of official proceedings.

3. If the charges cannot be disposed of informally, the student or group may file an appeal to the Student Appeals Committee.

### II. Code of Student Conduct

#### A. Rationale

The primary purpose for the imposition of discipline in the university setting is to protect the campus community. Consistent with that purpose, reasonable efforts will also be made to foster the personal, educational and social development of those students who are held accountable for violations of university regulations. However, the university must commit its policies and procedures first of all to protect and promote the academic enterprise. Consequently, it may be necessary to suspend or expel students who have been found responsible for violations of this Code, or who otherwise pose a substantial danger to the campus community.

#### B. Definitions

1. The terms "university" and "institution" mean Towson University (TU).

2. The term "student" includes all persons taking courses at the university, both full-time and part-time, pursuing undergraduate, graduate, professional, certificate, or continuing studies. Persons who are not officially enrolled for a particular term but who have a continuing relationship with the university are considered "students."

3. The terms "faculty member" and "instructor" mean any person hired by the university to conduct classroom activities.

4. The term "university official" includes any person employed by the university, performing assigned administrative, professional, or paraprofessional responsibilities (including student resident assistants and building managers).

5. The term "member of the university community" includes any person who is a student, faculty member, university official, or any other person employed by the university.

6. The term "university premises" includes all land, buildings, facilities, and other property in the possession of or owned, used, or controlled by the university (including adjacent streets and sidewalks).

7. The term "organization" means any number of persons who have complied with formal requirements for university recognition (including SGA, Greek, and NCAA).

8. The term "group" means a number of persons who are associated with each other but who have not complied with university requirements for registration as an organization.

9. The term "Hearing Board" means the hearing officer and judicial aides authorized by the director of Judicial Affairs to determine whether a student has violated the Code of Student Conduct.

10. The director of Judicial Affairs is that person designated by the university president to be responsible for the administration of the Code of Student Conduct.

11. The term "policy" is defined as the written regulations of the university as found in, but not limited to, the Code of Student Conduct, the Policies for University Housing, the Faculty Handbook, the university catalogs, the Towson University Procedures for Events with Alcohol, and the Student Organizations Handbook.

12. The term "academic dishonesty" is defined in the section of this policy entitled "Academic Dishonesty."



13. The term "interim disciplinary action" means discipline which is imposed pending the outcome of a court case for off-campus behavior.

14. The term "banned from campus" means that a student is prohibited from coming onto university property. A student who is banned from campus may be allowed to finish current course work off campus, if appropriate, and a tuition refund may be granted. As a result of a ban, the student will not have a permanent file in the Office of Judicial Affairs. A ban will normally only be issued after the student has been offered a meeting with a representative of the Office of Judicial Affairs.

### C. Scope

1. Generally, student or group conduct subject to institutional discipline is limited to: on-campus actions; off-campus actions which affect the university community or the university's pursuit of its mission, policies or procedures; off-campus actions by officially sponsored organizations, groups, or NCAA teams; or actions on university property which is leased to, or managed by, an entity other than the university.

2. However, a student charged with a violation of federal, state or local laws for off-campus behavior may be disciplined by the university without a judicial board hearing when: the student is found guilty by a court of law; the student pleads guilty or nolo contendere to the charges; the student is given probation before judgment; or, the case is settled.

Additionally, interim or final disciplinary action may be taken before any court action is completed. Examples of charges that may result in action include acts of violence, drug and alcohol related violations, and a citation for a disorderly house. Such action will be taken only after a limited investigation by the Judicial Affairs Office and after the student has been offered a meeting with a university official. Any interim action shall be reviewed, and appropriate final action taken, at the student's request or at the university's discretion, when a final

court decision is rendered or when the university receives additional persuasive evidence.

3. Some conduct clearly disturbs only the campus environment; when such behavior occurs, the university shall take internal action.

4. At all times, the university seeks to resolve conflict and protect its community at the most immediate level. Review and resolution of conflict without having to involve university judicial bodies is desirable. The university's Code of Student Conduct is most successful when formal procedures are not necessary.

5. When there is evidence that a student has committed a crime on campus, disciplinary action at the university will normally proceed independently of pending criminal charges, including when charges involving the same incident have been dismissed or dropped. The student may then be subject to civil authorities as well as internal disciplinary action.

6. When a student is charged with a violation of one or more provisions of this Code, a charge letter arranging a meeting with a representative of the Judicial Affairs Office will be sent to that student within a reasonable amount of time. At the meeting, the student will be informed of:

- a. specific violation
- b. description of alleged incident
- c. hearing or disciplinary conference procedure
- d. rights of appeal

### D. Prohibited Conduct

The following misconduct is subject to disciplinary action:

1a. intentionally furnishing false information to the institution.

1b. forging, altering, or using institutional documents or instruments of identification with intent to defraud, or to otherwise benefit therefrom.

2a. disruption or obstruction of teaching, research, administration or disciplinary proceedings.

2b. disruption or obstruction of university sponsored activities or events.

3. lewd, obscene or indecent behavior.

4. physical abuse of any person.

5a. unwanted physical contact or threat of physical contact with a university official.

5b. threats of violence or placing a person in fear of imminent physical injury or danger.

5c. any endangering conduct that imperils or jeopardizes the health or safety of any person or persons, including oneself.

5d. stalking, defined as: to follow or otherwise contact another person repeatedly, so as to put that person in fear for his or her life or personal safety.

6. inflicting mental or emotional distress upon a person through a course of conduct involving abuse or disparagement of that person's race, religion, sex, creed, sexual orientation, age, national origin or disability.

7. acts that invade the privacy of another person.

8. all forms of sexual assault including, but not limited to, rape, date/acquaintance rape, or other non-consensual verbal or physical conduct of a sexual nature.

9. abuse of any person; this includes verbal, written, e-mail, or telephone abuse.

10. intentionally or recklessly damaging, destroying, defacing or tampering with university, public or personal property of another.

11. uncooperative behavior and/or failure to comply with proper instructions of officials acting in performance of their duties.

12. violation of published institutional regulations and policies.

13. violation of state, federal and local laws.

14. unauthorized presence in institutional facilities.

15a. the possession or use of illegal drugs or drug paraphernalia when not in accordance with established policy.

15b. the sale, distribution or manufacture of illegal drugs when not in accordance with established policy.

16. the possession or use of any firearms or instrument which may be construed as a weapon, without express permission of the University Police.

17. the possession of explosives, fireworks, or pyrotechnic paraphernalia on campus.

18a. the possession or use of alcoholic beverages when not in accordance with established policy.

18b. public intoxication.

19. the unauthorized use of or entry into university computer systems.

20. violation of the university housing policy.

21. violation of any disciplinary sanction.

22. charging telephone or telecommunications charges to university telephones or extension numbers without authorization.

23. theft, attempted theft, possession of stolen property, conspiracy to steal or misappropriation of another's property. This includes, but is not limited to, removing, possessing, concealing, altering, tampering or otherwise appropriating goods or property without authorization.

24. academic dishonesty.

#### E. Penalties

The following penalties may be imposed upon students and all student organizations for violations of the Code of Student Conduct. With only two exceptions, federal regulation prohibits disclosing the outcome of judicial proceedings to anyone other than to the accused and to appropriate university personnel. The first exception relates to allegations of sexual assault: in those cases, the university will disclose to the victim of a sexual offense the outcome of any investigation by University Police or the Judicial Affairs Office pursuant to the victim's complaint against the alleged perpetrator of the sexual offense. The second case relates to alcohol and drug violations: the parents of students

under the age of 21 may be notified when students are found responsible for violations of the university's alcohol or drug policies.

1. **CENSURE:** A written reprimand for violation of specified regulations, including a warning that continuation or repetition of prohibited conduct may be cause for additional disciplinary action. This may include a specified period of probation.

2. **PROBATION:** Notice to the student that any further disciplinary violation, during a specified period of time, may result in suspension or expulsion from the university and or university housing.

3. **SOCIAL PROBATION:** Exclusion from participation in privileged or extracurricular institutional activities, including NCAA athletic events or practice, for a specified period of time. Additional restrictions or conditions may also be imposed. Violations of the terms of social probation, or any other violation of this Code during the period of probation, will at times result in a fine, suspension or expulsion from the university.

4. **SUSPENSION:** Suspension involves separation of the student from the university for a specified period of time and usually impairs a student's ability to pursue work at other colleges and universities. Normally, the student will also be barred from university premises during the period of suspension. Any student who is suspended shall not be entitled to any tuition or fee refund.

5. **EXPULSION:** Expulsion constitutes permanent separation of the student from the university. Any student who is expelled shall not be entitled to any tuition or fee refund.

6. **SUSPENSION OF GROUP:** Suspension shall consist of the withdrawal of an organization's recognition by the university, for a stated period of time, when an organization is found to have violated regulations. Suspension shall result in complete suspension of activities of the group during the stated period of time and may also include conditions for removal of suspension.

7. **ORGANIZATIONAL DISSOLUTION:** Organizational dissolution is a sanction imposed only upon student organizations guilty of serious and/or repeated viola-

tions of these standards. The sanctions involve permanent withdrawal of recognition by the university, denial of the use of university facilities or funds, and official dissolution of the organization on the campus.

8. **RESTITUTION:** Restitution may be imposed on students whose violation has involved monetary loss or damage. Fines may be imposed in addition to restitution. Restitution becomes a financial obligation to the university and either full payment or an agreement for partial payment according to a schedule agreed to by the director of Judicial Affairs is required before a student may register for classes again, or in the case of seniors, before the student may graduate.

9. **TERMINATION OF UNIVERSITY HOUSING CONTRACT:** Termination of a student's university housing contract may be imposed in order to safeguard the residence community if the seriousness of the violation warrants such action.

10. **FINES:** Fines of varying amounts may be imposed for certain violations, such as alcohol and drug related incidents. Fines must be paid prior to the end of the current semester, otherwise a student's registration privileges will be withheld or prior registration canceled.

11. **OTHER SANCTIONS:** Other sanctions may be imposed instead of or in addition to those specified above. For example, students may be subject to restrictions upon or denials of university parking privileges for violations involving the use or registration of motor vehicles on campus; sanction hours or research projects may be assigned; or the university housing contract may be placed on probation.

12. **DRUG PENALTIES:** (see Substance Abuse Policy below)

#### F. Standards and Procedures of Due Process

1. Students subject to suspension or expulsion from the university will be entitled to a judicial board hearing, except as described in section C.2. With the exception of allegations of academic dishonesty (see the section below: Academic Dishonesty), students subject to any other sanction will be entitled to a disciplinary conference.



2. The purpose of a disciplinary proceeding is to provide a fair evaluation of an accused's responsibility for violating disciplinary regulations. Although formal rules of evidence need not be applied, procedures shall comport with standards of fundamental fairness. Harmless deviations from the prescribed procedures shall not necessarily invalidate a decision or proceeding unless significant prejudice to an accused student or the university may result.

3. Any person may refer students or student groups or organizations suspected of violating this Code to the Judicial Affairs Office. Allegations of violations occurring within university housing should be referred to the Office of Housing and Residence Life. Those referring cases are normally expected to serve as a witness and to present relevant evidence in disciplinary hearings or conferences. The director of Judicial Affairs may appoint a member of the campus community to serve as an adviser to university witnesses. The role of the adviser shall be limited to consultation with the witnesses.

4. Suspensions and expulsions from the university and/or university housing will be made by the vice president for Student Affairs, or designee. All other sanctions will be determined by the director of Judicial Affairs, or designee. In all cases, the accused will be notified in writing of any sanctions to be imposed and of his or her rights of appeal.

#### G. Disciplinary Conference and University Hearing Procedure

1. **Disciplinary Conference:** The conference procedure is designed to reduce unnecessary proceduralism and potential contentiousness in disciplinary proceedings. A disciplinary conference will normally consist of an informal, non-adversarial meeting between the accused and a university administrator, as designated by the director of Judicial Affairs. Witnesses are not required to participate, unless cross-examination is necessary to resolve a dispositive factual issue. Documentary evidence, written statements, and hearsay can be relied upon. The accused will be given access to documentary evidence

and written statements in advance or during the conference and allowed to respond to them. Accused are also allowed to call appropriate and relevant witnesses.

The following procedural protections are provided to respondents in disciplinary conferences:

- a. written notice of the specific charges prior to the scheduled conference;
- b. reasonable access to the case file prior to and during the conference;
- c. an opportunity to respond to the evidence and call appropriate and relevant witnesses.

2. **University Hearing:** The following procedural guidelines shall be observed for all hearings held by the University Hearing Board. The University Hearing Board will be composed of the hearing officer, who shall preside and make the final decision, and one or two student judicial aides. In the absence of the judicial aides, the hearing officer may hear and decide the case alone. A case may not be heard if the hearing officer, or designated substitute, is not in attendance. The hearing officer shall be responsible for submitting the hearing panel's report to the Judicial Affairs Office.

a. The accused shall be given notice of the hearing date and the specific charges against him or her at least three calendar days in advance and shall be accorded reasonable access to the case file, which will be retained in the Judicial Affairs Office. (In some cases, the accused may choose not to wait three days for a hearing to take place.)

b. The hearing will be tape recorded.

c. The accused will be present for the hearing. If the accused fails to appear, this will be stated for the record and the hearing will continue.

d. The accused and the complainant may be accompanied by a friendly observer. This party may not be or act as legal counsel, except when concurrent criminal charges have been filed. Then counsel may not participate in the hearing, but may advise the accused.



e. The hearing officer shall exercise control over the proceedings to avoid needless consumption of time and to achieve orderly completion of the hearing. Any person, including the accused, who disrupts a hearing may be excluded by the hearing officer.

f. Witnesses shall be asked to affirm that their testimony is truthful and may be subject to charges of intentionally providing false information to the university.

g. Prospective witnesses, other than the complainant and the accused, will be excluded from the hearing during the testimony of other witnesses. In some cases, a university official may be present to offer relevant information regarding university policies and procedures. All parties and witnesses shall be excluded during hearing panel deliberations after the hearing.

h. The burden of proof shall be upon the university, which must establish the responsibility of the accused by a preponderance of the evidence. "Preponderance of the evidence" is that evidence which, when fairly considered, produces the stronger impression, has the greater weight, and is more convincing as to its truth when weighed against the evidence in opposition thereto.

i. Formal rules of evidence shall not be applicable in disciplinary proceedings conducted pursuant to this Code. The hearing officer shall admit all matters into evidence that reasonable persons would accept as having probative value, including documentary evidence, written statements, and hearsay. Repetitious or irrelevant evidence may, however, be excluded.

j. Documentary evidence and written statements shall only be admitted into evidence if available to the accused before or during the hearing.

k. Complainants and accused shall be allowed to call witnesses and accorded an opportunity to question those witnesses who testify for either party at the hearing.

l. The director of Judicial Affairs may appoint a special hearing panel member

in complex cases. Special panel members may question all parties, participate in hearing panel deliberations, and offer advice to the hearing officer.

m. The hearing will conclude with the accused making a final summation or statement.

n. The hearing officer's report will be presented to the Judicial Affairs Office within 72 hours. The student may view the hearing officer's written report by appointment.

o. The accused will receive the decision in writing from the vice president for Student Affairs or designee.

p. The taped records will be kept on file in the Judicial Affairs Office for one semester following the hearing.

#### H. Judicial Hearings for Student Organizations, Groups, and NCAA Teams

1. Student organizations, groups, and NCAA teams (referred to here collectively as "group") may be charged with violations of the Towson University Code of Student Conduct.

2. When one or more members of a group are charged with a violation of the Code of Student Conduct, the university may charge the group as well. A student group and its officers may be held collectively and individually responsible when violations of this Code by those associated with the group have received the consent or encouragement of the group or of the group's leaders or officers.

3. A position of leadership in a student group entails responsibility. Student officers or leaders cannot knowingly permit, condone, or acquiesce in any violation of this Code by the group. This section of the Code is designed, in part, to hold a group and its officers accountable for any act of hazing. The express or implied "consent" of the victim or participant is not a defense.

4. The officers, leaders, or any identifiable spokesperson for a student group may be directed by the vice president for Student Affairs or designee to take appropriate action designed to prevent or end violations of

this Code by the group. Failure to make reasonable efforts to comply with the vice president for Student Affairs' directive shall be considered a violation of this Code, both by the officers, leaders, or spokesperson for the group and by the group itself.

5. A disciplinary conference for student groups will be conducted in a manner similar to the procedures listed above. Conferences shall be conducted with one spokesperson representing the group, usually the president. Any sanction listed in the Code of Student Conduct may be imposed on a group and its individual members. If individual members are subject to suspension or expulsion from the university for actions of the group, those individuals will be offered a judicial board hearing.

#### I. Emergency Suspensions

1. When there is evidence that the continued presence of a student on the university campus poses a substantial threat to him/herself or others, or to the stability and continuance of normal university functions, the vice president for Student Affairs, or designee, may immediately suspend a student from any or all university activities, including university housing, for an interim period pending a hearing or medical evaluation. Such an emergency suspension may become effective immediately without prior notice.

2. An emergency suspension may be imposed only:

a. to ensure the safety and well-being of members of the university community;

b. to ensure the student's own physical or emotional safety and well-being;

c. if the student poses a definite threat of disruption of or interference with the normal operations of the university.

3. A student issued an emergency suspension shall be denied access, as determined appropriate by the vice president for Student Affairs, or designee, to:

a. the entire campus, including classes;

b. university housing and dining facilities;

c. all other activities or privileges for which the student might otherwise be eligible.

4. In these cases, a university hearing or medical evaluation will be scheduled as soon as is practicable.

#### J. Appeal Procedures for Disciplinary Proceedings

1. Any disciplinary determination resulting in expulsion or suspension from the university may be appealed to:

a. the Student Appeals Committee

b. the president of the university

2. Any disciplinary determination resulting in suspension from university housing may be appealed to: the Student Appeals Committee.

3. Any disciplinary determination resulting in any lesser sanction may be appealed to: the vice president for Student Affairs.

The basis for appeal of a disciplinary sanction must be one of the following:

a. a flaw in the student's right of due process

b. evident bias in the decision of the hearing board or the individual conducting a disciplinary conference

c. inconsistent or overly severe sanction imposed

d. new evidence or insufficient consideration of all aspects of the situation

Appeals must be submitted in writing to the Office of Judicial Affairs within five business days after receipt of the sanction letter. Failure to appeal within the allotted time will render the original decision final and conclusive. Appeals shall be decided upon the record of the original proceedings, written letters submitted by the parties, and any further information requested by the committee.

Normally, new hearings will not be conducted on appeal. The imposition of sanctions will be deferred during the appeal process unless, in the judgment of the vice president for Student Affairs, or designee, the continued presence of the student on the campus or in university housing poses a

substantial threat to him/herself or to others, or to the stability and continuance of normal university functions.

## GRADUATE STUDENT PROCEDURES FOR APPEALS, HEARINGS AND GRIEVANCES

### STUDENT RIGHTS AND RESPONSIBILITIES

**Rights:** The student is entitled to privacy, expression, nondiscrimination, nonharassment and appeal.

**Responsibilities:** The student is responsible for: (1) being knowledgeable of, and observing, all university and Graduate School policies, regulations, procedures and academic requirements, including specific requirements of the program; and (2) participating in the maintenance of a high standard of academic integrity.

Appeals and grievances are initiated by the student. Hearings are initiated by the university.

### APPEALS

**Exceptions to Policies:** A student may petition for an exception to academic and admissions policies and procedures on either procedural or substantive grounds. The petition must be made to the dean of the Graduate School. If not satisfied with the dean's decision, the student may submit a written appeal to the Graduate Studies Committee, c/o the Graduate School. Appeal of a Graduate Studies Committee decision is made in writing to the provost of the university.

Appeals of academic and admissions policies other than those that follow must adhere to the appeals procedure stated above.

**Dismissal from Programs:** The dean of the Graduate School may dismiss a student for cause from a program based on academic or other Graduate School policies or on the recommendation of a department. A student who is dismissed will be notified in writing of the dismissal. The student's written appeal must be received in the

Graduate School within 15 working days of the date of the notification of dismissal.

**Grades:** A student appealing a course grade must make all reasonable efforts to resolve the matter informally in the following sequence: (1) he or she must meet with the instructor; (2) if not satisfied, the student meets with the department chairperson; (3) if still not satisfied, the student meets with the dean of the college or school. If the problem is not resolved to the student's satisfaction, he or she may appeal in writing to the Graduate Studies Committee. The appeal will be received only after the above steps have been taken, and must be received by the Graduate Studies Committee no later than the end of the semester following the one in which the grade was received.

The Graduate Studies Committee reviews the appeal, and will send it to the Adjudication Committee only if there is sufficient evidence that a grade has not been determined in accordance with the terms set forth by the instructor.

**Academic Integrity:** Instructors are responsible for maintaining the academic integrity of courses and will initially handle problems of classroom conduct, including, but not limited to, cheating and plagiarism. The instructor may lower the student's grade or give a failing grade for the course. A student appealing an instructor's decision must make all reasonable effort to resolve the matter informally in the following sequence: (1) he or she must meet with the instructor; (2) if not satisfied, the student meets with the department chairperson; (3) if the problem is not resolved to the student's satisfaction, he or she may appeal in writing to the Graduate Studies Committee. The appeal will be received only after the above steps have been taken, and must be received by the Graduate Studies Committee no later than the end of the semester following the one in which the grade was received.

## HEARINGS

Students are expected to maintain a high standard of academic integrity. If a violation of academic integrity occurs in a classroom and if the instructor decides that further action beyond that taken within the course is warranted, he or she will notify the student that a formal charge will be made to the Graduate School Committee. A written report of the incident will be filed with the committee.

In cases of violation of Graduate School policies, efforts will be made by the Graduate School administration to clarify and to allow the student the opportunity to address and resolve the issue before any charges are made in writing to the Graduate Studies Committee.

A hearing before the Graduate Studies Committee is held whenever charges are made against a student by the Graduate School for infraction of Graduate School policy which includes, but is not limited to, academic integrity, falsification of documents, or other acts of misrepresentation. Disciplinary action by the committee may include dismissal from the Graduate School.

### Hearing Procedures:

1. The proceedings are recorded.
2. The chairperson of the Graduate Studies Committee explains the purpose of the hearing.
3. The chairperson reads the charges. The student is present for the hearing. If the student does not appear, this will be stated for the record and construed as a plea of guilty.
4. The student may be accompanied by a friendly observer. This party may not be or act as legal counsel, except when concurrent criminal charges have been filed. Then counsel may advise the accused party but may not otherwise participate in the hearing.
5. Evidence, either in writing or by testimony of witness, is presented. Witnesses may be questioned by the committee and the student.
6. The student is afforded an opportunity to present his or her side of the story and

to call witnesses. Character witnesses will not be heard. Witnesses for the student may be questioned by the committee and then be excused.

7. The committee members may ask questions of the student, the instructor and the graduate coordinator.
8. The student may ask questions and make a closing statement.
9. The student and other noncommittee members are excused.
10. The committee deliberates in executive session and renders a decision. These deliberations are not recorded.
11. The student is notified of the decision by letter within 15 days of the hearing. When appropriate, the notification includes instructions on further appeals.
12. The recording will be kept on file in the Graduate School for one year.

## GRIEVANCES

Redress of Grievance: Grievances based on the following grounds are made to the judicial affairs officer, who will instruct the student on submitting a written grievance:

1. a flaw in the student's right of due process
2. evident bias in the decision of the hearing body
3. inconsistent or overly severe sanction imposed
4. new evidence of insufficient consideration of all aspects of the situation

Discrimination and Harassment: The university complies with all state and federal civil rights legislation. The university's policy is to prohibit discrimination against any individual for reason of race, color, religion, national origin, political affiliation, marital status, sexual orientation, disability, veteran status or other nonmerit factor.

If a student alleges discrimination and/or harassment, he or she shall make all reasonable effort to resolve the issue(s) with, and in the following order: (1) the instructor (2) the department chairperson and (3) the dean of the college or school within 30 days of the alleged incident. The student should confer with the fair practices officer if issues are not satisfactorily resolved. A student making a



formal complaint of discrimination and/or harassment must submit a written statement to the Office of Fair Practices within 180 days of the date of the alleged incident.

#### **HAZING, PRE-INITIATION POLICY**

"Hazing," in any form is against the law (Annotated Code of Maryland, Article 27, Section 268H) and is strictly prohibited at Towson University. When this policy is violated, action may be taken against all participants, including pledges. "Hazing" is defined as any action taken or situation created, intentionally, whether on or off campus to produce mental or physical discomfort, embarrassment, harassment or ridicule. Such activities and situations include but are not limited to paddling in any form; creation of excessive fatigue; physical and psychological shocks; quests, treasure hunts, scavenger hunts, road trips, or any other such activities carried on outside the confines of the house; wearing, publicly, apparel which is conspicuous and not normally in good taste; engaging in public stunts and buffoonery; morally degrading or humiliating games and activities, late night sessions which interfere with scholastic activities; and any other activities which are not consistent with the academic mission of the university.

Students may bring their concerns regarding hazing to the Office of Student Involvement and Transitions.

#### **NON-DISCRIMINATION POLICY**

Towson University is in compliance with federal and state laws and regulations that prohibit illegal discrimination. The university does not discriminate on the basis of sexual orientation. Sexual harassment (see following section) is considered a form of sexual discrimination.

#### **Procedure for Filing and Investigating Complaints of Discrimination in Education or Employment:**

Students and employees may bring concerns about discrimination or unfair practices in education or employment to the Office of Fair Practices for investigation (Administra-

tion Building, room 205, 410-704-2361). After a student or employee has filed a formal complaint, full information from the complainant, from university records, and from university personnel involved in the incident will be gathered and a determination as to the merits of the complaint will be made.

The investigation will normally be completed within 30 days. If a key person is unavailable or if the complaint is complex, involves a grade dispute or other faculty matter, the investigation may take longer. Every effort will be made to complete the investigation within the semester in which it is filed, unless the complaint is filed within the last two weeks of a semester, in which case every effort will be made to complete the investigation by the beginning of the following semester.

Students are encouraged to bring incidents that they think are discriminatory to the attention of university officials. The university cannot take appropriate action unless it is aware that a problem exists.

#### **SEXUAL OR GENDER HARASSMENT**

Sexual harassment constitutes a serious threat to the free interaction and exchange necessary for educational and personal development, and it is entirely unacceptable on this campus. Definition: Sexual or gender harassment may range from offensive gender or sexual innuendos to coerced sexual relations. It can happen to both men and women, but women are more often victims.

Harassment occurs when a person in a position of control or influence uses authority and power to gain sexual advances and threats or punishes for refusal to comply. It includes suggestive remarks about clothing or physical attributes; leering or ogling; unnecessary touching; subtle or direct requests for sexual favors; implied or overt threats of consequence; or a hostile sexual environment. Students and employees may bring concerns about sexual harassment to the Office of Fair Practices for investigation.

### AIDS POLICY

In accordance with the university's Non-Discrimination Policy, no student, faculty or staff member shall be denied access to the academic, social or employment opportunities offered by Towson University solely because he/she has AIDS or is an HIV carrier. A university committee (appointed by the president) will be appointed to evaluate individual cases of HIV infection and to make recommendations as questions of risk or cases of specific emergencies require. Educational programs will be implemented for the campus and the campus community to assist in preventing further spread of the virus.

### POLICY ON SUBSTANCE ABUSE FOR FACULTY, STAFF AND STUDENTS

#### University System of Maryland Policy

The University System of Maryland, as an employer, strives to maintain a workplace free from the illegal use, possession, or distribution of controlled substances (as defined pursuant to Controlled Substances Act, 21 U.S.C. Sections 801, et. seq.). Unlawful manufacture, distribution, dispensation, possession or use of controlled substances by university employees in the workplace is prohibited under university policy. In addition to any legal penalties under federal and state law, employees found to be in violation of this policy or the Maryland Governor's Executive Order on Substance Abuse, 01.01.1991.16, may be subject to corrective action under applicable university personnel policies. The university supports programs aimed at the prevention of substance abuse by university employees. Employees are encouraged to seek assistance for substance-dependency problems. Employee-assistance counseling and leaves of absence to attend rehabilitation programs are appropriate means of dealing with these problems. Towson University Policy

The use of controlled substances and the abuse of alcohol present a serious threat to individual health and everyone's safety. Moreover, the use of illegal drugs and the abuse of alcohol can result in less than complete reliability, stability, and good judgment which is inconsistent with the standards set for the faculty, staff and students of this uni-

versity. Towson University, as an employer, strives to maintain a workplace free from illegal use, distribution or possession of controlled substances. Any person found to be participating in such activity will be subject to administrative disciplinary action, mandatory counseling and treatment and/or criminal proceedings.

The use, possession, and/or sale of illegal drugs, are considered violations of Towson University's Code of Student Conduct, the faculty contract, and the terms of employment of regular, contingent (exempt/non-exempt) staff. Faculty, students and employees who use, possess or sell illegal drugs shall be subject to discipline, including mandatory counseling, suspension or dismissal from the university. The university will take disciplinary action based on reasonable available information; such action will be independent of any civil or criminal processes precipitated by the same incident and will follow the policies and procedures of the university and the University System of Maryland Board of Regents. In the workplace, use, possession, and/or sale of illegal drugs and controlled substances are also violations of state and federal laws for which individuals are subject to university disciplinary processes and/or arrest and criminal prosecution.

These serious workplace situations must be handled in ways which ensure the protection of the civil rights and handicapped rights of the accused, the treatment and rehabilitation of employees, and the notification of the necessary administrative and legal authorities.

Specific procedures for reporting drug use, penalties and appeals are part of the Towson University Code of Conduct. Employee disciplinary measures and appeals for violations of this policy as well as other policies of the university are part of the Faculty Handbook, the Part-Time Faculty Handbook, and the Personnel Manual.

In addition to the university policy on substance abuse, all employees of the university, including student employees, are subject to the Maryland Governor's Executive Order 01.01.1991.16 on the Drug and Alcohol Free Workplace.

In accordance with federal legislation, Towson University's substance abuse policy will be distributed annually to all students and employees through the campus or U.S. mail.

#### Education

In accordance with federal legislation, there will be an annual distribution in writing, to each employee and student of:

1. the dangers of drug abuse in the workplace (to include student employees);
2. the institution's policy of maintaining a drug-free workplace and drug-free campus;
3. standards of conduct that clearly prohibit, at a minimum, the unlawful possession, use or distribution of illicit drugs and alcohol by students and employees on university property or as part of any university activities;
4. a description of applicable legal sanctions under local, state or federal law;
5. a description of health risks associated with the use of illicit drugs and abuse of alcohol;
6. a description of available drug or alcohol counseling, treatment, or rehabilitation and/or reentry programs;
7. a clear statement of the disciplinary sanctions that the university will impose on students and employees.

All supervisory faculty and staff will receive training on drug awareness and treatment. This training program shall include existing as well as new supervisory personnel. Drug awareness training will be an integral part of the university's student orientation program.

Faculty and staff orientations will include programming especially designed to focus on the university's policy toward substance abuse.

#### Employee/Student Assistance Programs

Towson University's health and drug education programs will inform the entire university community of the physical and psychological effects of the non-medically supervised use of illegal drugs, alcohol and consciousness expanding drugs. The education

program shall make employees aware of the consequences of prosecution under local, state and federal laws and the rules for governance for university imposed discipline.

The university recognizes the importance of individual rights and respects the privacy of employees and students. To this end, the university has an established counseling program for students and an Employee Assistance Program (EAP) for faculty and staff. These programs have been designed to provide counseling and rehabilitative services. Employees and students are encouraged to contact the appropriate program in the event they have a substance abuse problem. In this way a student or employee can correct the problem before it jeopardizes a job, an education, family, or individual well being.

Employees or students who need help with a problem of drug abuse shall be encouraged to call the Counseling Center, the Health Center, Human Resources or the office of the vice president for Student Affairs. The resources of the Counseling Center shall be available for supervisors who wish consultation in handling employees who may have substance abuse problems. The call will be treated with confidentiality and respect.

Voluntary participants in an assistance program will not jeopardize their continued employment or enrollment at the university provided that their job performance or behavior is consistent with established standards. However, voluntary participation in an assistance program will not prevent disciplinary action for violation of the policy described herein, where such violation has already occurred.

#### Procedures for Grievances and Appeal

Towson University strongly encourages the use of drug rehabilitation programs as the keystone to a drug-free environment. For each class of employee and student category, the formal rules of procedure remain intact. These include the student judicial procedures and criminal justice procedures. Following a conviction for violation of a drug offense in the workplace, disciplinary action can be imposed, up to and including termination or



disenrollment. As a condition of continued employment or education, an employee or student may be required to participate in an approved drug abuse rehabilitation program.

#### **Suspected Drug Use, Possession, or Sale**

The use, possession or sale of illegal drugs violates state and federal laws for which all offenders are subject to arrest and criminal prosecution, as well as university administrative processes. These serious offenses must be handled in ways to ensure the guarding of evidence, the protection of civil rights of the accused, and notification of the proper authorities. To this end, specific procedures outlined in this policy are to be followed in any campus situation where substances are suspected to be illegal drugs.

Any individual, student or employee, directly associated with the University System of Maryland who uses or becomes involved with illegal drugs without proper medical supervision, shall be subject to discipline, including suspension or dismissal, as appropriate.

Students, faculty and staff, in their routine activities, may observe suspected illegal drug activities. As a result, some staff members may become involved in the determination of disciplinary action that follows suspected use, possession or distribution of an illegal substance. Specific actions or responsibilities in regard to the suspicion of illegal substances have been outlined in other paragraphs of this policy.

The university reserves the right to conduct drug testing consistent with applicable federal and state laws.

#### **Alcohol Use and Abuse**

Towson University views with alarm the potential and real problems caused by alcohol abuse and alcoholism. The alcohol policy has been directed to students and employees engaged in the legal use of alcohol. The implicit as well as explicit focus for prudent drinking is with moderation rather than intoxication.

Any person using alcoholic beverages at any time and at any place while on the Towson University campus is responsible to civil

and university authorities for compliance with state and county law.

It is against Maryland State law for anyone under the age of 21 to purchase, possess or consume alcoholic beverages.

It is unlawful for any minor to knowingly and willfully make any misrepresentation or false statement as to his/her age in order to obtain alcoholic beverages.

It is unlawful for any person to purchase alcoholic beverages for consumption by an individual who is known to be a minor.

It is unlawful for any person to possess open containers of any alcoholic beverages in a public place.

Policies concerning the possession and/or use of alcoholic beverages on campus and at special university/community events shall be the delegated responsibility of the vice president for Student Affairs.

#### **Procedures for Reporting Substance Abuse**

The following information shall provide the basic guidelines for the reporting of student or employee drug use, possession, sale or distribution. Other procedures to be followed have been specified in other sections of this policy.

Upon observing or receiving a report of suspected use, possession, or distribution of an illegal drug or the illegal use of alcohol, faculty and staff, and/or students shall proceed in the following manner:

**Step One:** Report suspicions of illegal drug/or alcohol use or possession to the administrator of your area or the appropriate vice president. Any faculty or staff member who observes the workplace use or possession of illegal drugs or alcohol must take appropriate action.

Students observing drug activity in the residence halls should notify a housing staff member. These administrators will notify the appropriate authorities and take appropriate action.

**Step Two:** Use judicious thought and sound judgment when approaching individuals suspected of illegal drug or alcohol use, possession or distribution. It is preferable to leave drugs or alcohol in their original location until the authorities take action.



**Step Three:** The university administration will determine if state or federal laws may have been violated. University employees should not become involved in mediating any situation involving illegal drug or alcohol use.

#### **Penalties for Substance Abuse Penalties for Faculty and Staff**

Towson University strongly encourages the use of drug rehabilitation programs as an effective measure in creating a drug-free workplace program. However, additional penalties may be implemented up to and including reprimand, suspension, mandatory counseling, mandatory participation in a drug rehabilitation program and/or dismissal. Appropriate university grievance procedures shall be used for each classification of employee.

Any individual who has been convicted of a controlled dangerous substance offense on or after January 1, 1991 shall be required to disclose that fact when applying for a license renewal. The licensing authority may refuse to issue the license or impose appropriate conditions on the license, except for non-commercial driver's licenses (Maryland Drug Enforcement Act of 1990).

Maryland law [Art. 27, 8, 286, and 287 Annotated Code of Maryland (1990)] states that persons who manufacture, distribute, dispense, or possess a controlled dangerous substance may be subject to imprisonment (length of time varies) and fines (\$15,000 and up).

#### **Penalties for Students**

In addition to the laws of the University System of Maryland, the State of Maryland and the nation, Towson University students shall be governed by rules referred to as the "Towson University Code of Conduct." Within these campus guidelines, students shall be subject to institutional discipline if they use, possess, distribute, or sell illegal drugs and illegally use or abuse alcohol. There may be various penalties applied to the student convicted of misuse of drugs and alcohol, depending on the situation. Individuals are encouraged to use voluntary rehabilitation programs and may be required to

receive mandatory counseling and treatment. If a student is suspected by the university police to have violated state and/or federal laws with regard to illegal drugs or use of alcohol, the student will be subject to arrest and criminal prosecution.

All students suspected of substance abuse violations may be referred to the director of Judicial Affairs. The student will be subject to a due process hearing in accordance with institutional disciplinary guidelines. Disciplinary action at the university will normally proceed whether or not criminal charges related to the same incident have been processed and sustained. The university encourages voluntary counseling and may require participation in an approved treatment program.

Where there is evidence that the continued presence of a student on the university campus poses a substantial threat to self, others, or to the stability and continuance of normal university functions, the vice president for Student Affairs, or a designee, may immediately suspend, on an emergency basis, a student from any or all university activities (including university housing programs and class attendance) pending a hearing or medical evaluation. A hearing will be scheduled in a timely fashion to adjudicate the case as swiftly as possible. During the period of emergency suspension, if the student needs access to the campus, arrangements can be made for the student to come to campus, on a limited basis, to attend counseling sessions and/or conduct business, usually with an escort. Such an interim suspension can become effective immediately without prior notice.

The following penalties described herein are in addition to those penalties listed in the section on general procedures and penalties for suspected drug use, possession, or sale. The specific penalty prescribed will usually depend on the nature of the alleged violation. Penalties may be administered following a judicial hearing where the suspected offender has been found to be guilty of specific charges. Possible penalties for student

violations may include, but are not limited to, the following:

**PENALTY ONE:** The student user may be subject to referral to a mandatory drug treatment/education program, and/or the termination of the university housing contract, denial of access to university housing halls and social functions. If suspended, permission to return to school will be considered after the period of suspension and a verified report of attendance in a drug treatment/education program. Repeat offenders may be subject to more severe actions.

**PENALTY TWO:** The student distributor may be subject to referral to a mandatory drug treatment/education program and/or suspension from school for at least one year. Permission to return to school will be considered after the period of suspension and a verified report of attendance in a drug treatment/education program. Repeat offenders may be subject to more severe actions.

**PENALTY THREE:** The student conspirator, who brings together the seller and the buyer, may be subject to referral to a mandatory drug treatment/education program and/or suspension for at least one semester. Permission to return to school after the period of suspension will be considered with verified attendance in a drug treatment/education program.

**PENALTY FOUR:** Greek Organizations, who have been found to tolerate drug use, possession, and/or sale on the part of their members will be subject to a drug education program for the group.

Maryland law [Art. 27, 8, 286, and 287 Annotated Code of Maryland (1990)] states that persons who manufacture, distribute, dispense, or possess a controlled dangerous substance may be subject to imprisonment (length of time varies) and fines (\$15,000 and up).

#### **Recipients of Federal Grant/Contracts/Awards**

Any faculty, staff member or student applying 1) for a federal grant/contract in which an in the workplace drug-free policy has been required, 2) for a "Pell Grant" or any other student/faculty grant/award or fellowship in which an in-the-workplace drug-free

policy has been required, and 3) for a sub-contract with the Department of Defense, will be required to comply in accordance with federal regulations.

1. Each individual must certify in writing to abide by the terms of the Towson University Drug-Free Workplace Policy.

2. Each individual must notify the Office of Sponsored Projects and Research Administration or the Office of Financial Aid of any criminal drug conviction occurring in the workplace, no later than 5 days after conviction.

The university will be responsible for notifying any contracting or granting agency, within 10 days of employee notification otherwise receiving actual notice, of a conviction in (2) above.

If a grant or award is directly made to an individual, rather than the institution, the individual will certify in writing to the institution to not engage in unlawful manufacture, distribution, dispensation, possession, or use of any controlled substance in the workplace or while conducting any work activity with the grant/contract and will abide by the terms of this Towson University Substance Abuse Policy.

#### **Relationship with External Contractors**

The university is committed to encourage all non-state entities, who do business with the university or otherwise receive funds from the university, to make a "good faith" effort to eliminate illegal drug abuse from their workplace. Therefore, in accordance with Executive Order 01.01.1991.16, the university shall take whatever action necessary and appropriate to require a drug-free workplace, in accordance with applicable federal and state law, on each recipient of a state contract, grant, loan or other state funding instrument.

#### **Biennial Review**

The Towson University Substance Abuse Policy and Program will be reviewed every two years (a) to determine effectiveness and the need to implement change as necessary, and (b) to assure that sanctions developed and implemented were consistently enforced.

### Responsibility

The president of Towson University will appoint a campus coordinator for all substance and alcohol abuse programs. This administrator will be responsible to the president for the implementation of this policy and the university's Drug Free Workplace and Drug Free Campus plans. The president shall also hold responsible all faculty, staff, and stu-

dents for supporting the campus coordinator, especially those who occupy positions of leadership and supervision.

### "Good Faith" Efforts

Towson University will at all times make a "good faith" effort to maintain a drug-free and substance abuse free workplace and campus through the implementation of this policy.



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**From I-95 (northbound and southbound):**

Take the Baltimore Beltway I-695 west (toward Towson). Take exit 25, Charles Street, south. Proceed approximately 1.7 miles. Turn left on Towsontown Boulevard, and proceed to the first stoplight. Turn right on Osler Drive and make the first right to the Enrollment Services Center parking lot.

**From I-83 (northbound and southbound):**

Take the Baltimore Beltway I-695 east (toward Towson). Take exit 25, Charles Street, south. Proceed approximately 1.7 miles. Turn left on Towsontown Boulevard, and proceed to the first stoplight. Turn right on Osler Drive and make the first right to the Enrollment Services Center parking lot.

**From I-70 (eastbound):**




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**From Baltimore (Penn Station):**

Proceed north on Charles Street for five miles. Turn right on Towsontown Boulevard, and proceed to the first stoplight. Turn right on Osler Drive and make the first right to the Enrollment Services Center parking lot.





-  Visitor Parking
-  Visitor Parking/  
Parking Information Kiosk
-  Accessible Parking

- Academic and Administrative Buildings - E6**
- AD Administration Building - E6
  - AH Auburn Houses - E2
  - BU Burdick Hall - B5
  - CA Center for the Arts - C4
  - CK Cook Library - D7
  - DH Dowell Health Center - C7
  - E5 Enrollment Services Center - A4
  - GE Glen Elk - C7
  - G5 General Services - A5
  - HH Hawkins Hall - C6
  - LH Lecture Hall - C6
  - LI Lutharum Hall - C7

- Residence Buildings**
- BK Berkshire Apartments - C9
  - A1 Glen Complex (A Building) - C5
  - BT Glen Complex (B Building) - C5
  - CT Glen Complex (C Building) - D5
  - DT Glen Complex (D Building) - D5
  - GD Glen Dining Hall - C5
  - MH Millennium Hall - B4
  - NE Newell Hall - D7
  - ND Newell Dining Hall - D7
  - PR Pretzmann Hall - C7
  - RT Residence tower - C7
  - RI Richmond Hall - D7
  - SC Scarborough Hall - D8
  - TR Towson Run Apartments - A3
  - WA Ward Hall - C9
  - WE West Hall - C7



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